

The 1940
CADILLAC
LA SALLE
DATA BOOK



CADILLAC MOTOR CAR DIVISION

GENERAL MOTORS SALES COR-
PORATION, DETROIT, MICHIGAN

Sales Promotion Department

● All information contained in this Data Book has been carefully checked with the most reliable sources. The Cadillac Motor Car Division cannot assume responsibility for the absolute authenticity of this information and reserves the right to change any specifications, parts or equipment at any time without incurring any obligation to equip same on automobiles previously sold.

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THERE IS A NEW CADILLAC OR LASALLE

The 1940 Cadillac-LaSalle Program completely blankets all car markets above \$1000. With seven new lines of cars, including 51 body styles, there is a new Cadillac or LaSalle for every buyer in our market this year. No sales organization has ever had so all-comprehensive a line of quality motor cars to sell. Obviously, the opportunities for greater sales volume and higher commissions for every Cadillac-LaSalle salesman are much greater than at any time in the past.

These are the new Cadillacs and LaSalles which make this increased volume and higher earnings possible:

<i>Series</i>	<i>Body Styles</i>	<i>Wheelbase</i>
LaSalle Fifty	5	123"
LaSalle "Special"	4	123"
Cadillac Sixty-Two	4	129"
Fleetwood Sixty Special	4	127"
Fleetwood 72	6 pleasure 2 business	138"
Fleetwood 75	12 pleasure 2 business	141"
Cadillac Sixteen	12	141"

FOR EVERY BUYER IN OUR MARKET

These seven complete lines of Cadillacs and LaSalle's feature major improvements on all fronts—new style and beauty, greater interior roominess, new luxury, improved riding comfort, smoother performance, better operating economy, easier handling and greater safety. Their incomparable values challenge Cadillac-LaSalle salesmen with these 1940 sales objectives:

1. To maintain and extend Cadillac's undisputed leadership in the high price field. During 1939 nearly three out of every four cars sold in this field were Cadillacs*.
2. To increase even further Cadillac-LaSalle's share of the business in the upper medium price field. Last year LaSalle and Cadillac 61 secured nearly 25% of this market* and in recent months out-sold every competitive make. Our 1940 objective should be a minimum of 25% of this market.
3. To secure greater penetration into the market just below LaSalle in price by selling to people who have unknowingly contented themselves with cars of lesser quality. This market represents by far the greatest sales and money-making opportunities.

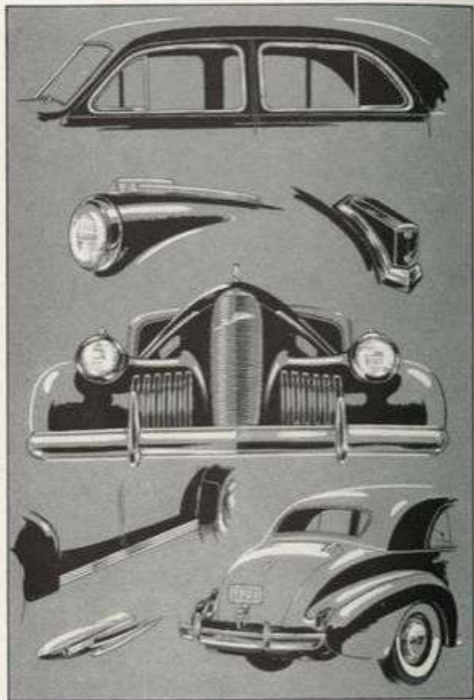
Unquestionably, the new Cadillacs and LaSalle's call for new records both in volume and profits in 1940.



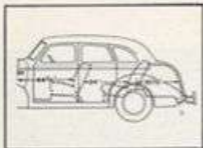
**Based upon new car registrations Jan. through July, 1939
compiled by R. L. Polk & Co.*

Again New Style and Beauty

The New 1940 LaSalles



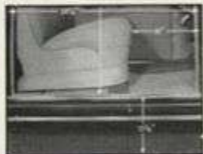
The New Cadillacs and LaSalles Are the Roomiest Cars Ever Built



Compact V-8 Engine Affords Roominess



Wide LaSalle "Special" Seat



Extreme Ease of Entrance



Roomy Fleetwood Interior

New, longer bodies have increased LaSalle and Cadillac Sixty-Two wheelbase three inches. The new Fleetwood 72 provides both extensive roominess and driving ease on a three-inch shorter wheelbase than the Fleetwood 75.

In each new Cadillac and LaSalle model interior dimensions are the largest ever provided in cars of their respective size. In LaSalle "Special," Cadillac 62 and Fleetwood 72 front seats are as much as six inches wider than before.

These new cars are also lower to the ground and doors are unusually high and wide thus affording maximum ease of entrance or exit, with or without running boards. The three entirely new Cadillac-LaSalle bodies also feature from ten to fourteen inches width from front seat cushion to door pillar for entrance ease, depending upon position of the front seat adjustment.

In all 7-passenger types the exclusive auxiliary seat design continues to provide unequalled roominess for these passengers.

The New Cadillacs and LaSalle's Offer Custom Interiors for the First Time in Medium Priced Cars

A choice of harmonizing interior color schemes, a strictly custom feature never before known to be offered below \$3000, is available in several new Cadillacs and LaSalle's. Instrument panels, flexible steering wheel, garnish mouldings, paneling, hardware decorations and even floor carpets are all especially styled in shades of tan or gray to match the upholstery cloth selected by the customer.

Included in the tasteful appointments of each new Cadillac or LaSalle are cigarette lighter, electric clock, front door arm rests, rear seat center and side arm rests, assist straps, ash receivers, robe cord and genuinely comfortable recessed foot rest.

On LaSalle "Special," Cadillac 62 and several Fleetwood types, including the Sixty Special, there are rear door window ventipanes for healthful, refreshing ventilation.



New, Smoothly Curved Instrument Panel



Colorful Quality Cloth Options



Beautiful New Hardware



Deeply Cushioned Center Arm Rest

The New Cadillacs and LaSalles Are America's Finest Riding Cars



Improved Knee Action



Longer Rear Springs



Cross Link Rear Stabilizer



Foam Rubber Padded Cushion

Controlled-Action Ride, pioneered by Cadillac last year and the greatest advancement in riding comfort since Knee Action, has been greatly improved. Now the softest, smoothest ride is obtained in addition to car controllability under all road and speed conditions.

The new LaSalle and Cadillac 62 chassis suspensions have been patterned after the world-famed Sixty Special both in engineering design and riding comfort objectives. The new Fleetwood 72 follows closely the luxurious comfort standard established by the larger Fleetwoods. All models have long leaf springs with waxed liners, front and rear ride stabilizers and softer action shock absorbers for refined riding comfort.

New seat cushions have a thick pad of foam rubber over soft coil springs. Padding over the rubber insures seat coolness. This construction further improves lounge chair comfort for Cadillac-LaSalle front and rear passengers.

The New Cadillacs and LaSalle's Have Smoother Performance and Better Operating Economy

Many improvements in carburetion and ignition lift LaSalle horsepower to 130 at 3400 r.p.m., provide smoother performance at all speeds for all Cadillac-LaSalle V-8's and increase LaSalle gasoline economy by as much as one and one-half miles per gallon.

A new carburetor for LaSalle, several refinements in the Cadillac V-8 carburetor, a rearranged intake manifold system and new, special vacuum spark advance for all Series combine to secure more uniform fuel combustion, smoother acceleration and considerably improved operating economy.

The new Peak Load Generator has greater capacity and both regulates voltage and controls current for a maximum charge of 34 amperes above 20 miles per hour. Batteries are maintained at peak condition regardless of electrical load, which lengthens their life.



LaSalle Acceleration



New LaSalle Carburetor



Improved Manifolding



Vacuum Spark Advance

The New Cadillacs and LaSalles are the Easiest of All Cars to Drive



Easier Synchronomatic Shift



Smoother Clutch Engagement



Easy-to-Read Instruments



Short Turning Circle

Synchronomatic Shift, first introduced by Cadillac two years ago, has precipitated almost universal adoption. None have achieved the degree of stability in shifting "feel," ease of shifting nor attractive quality of the steering column control. For 1940 Cadillac improves shifting ease up to 33 per cent by increasing leverage in the control arms.

In addition, a new clutch contains a driven disc of waved spring steel which cushions engagement and makes shifting smoother and easier than ever before.

Accessibility of driving controls, wide spoked steering wheel, half-circle horn ring and new curved, better illuminated speedometer are all additional features pertaining to driving comfort.

Turning radius, important in traffic and parking, is less for all Cadillac-LaSalles than similarly priced models of other makes.

The New Cadillacs and LaSalles Provide Unexcelled Vision and Safety

Vision, which lends peace of mind to driving, is most extensive through Cadillac-LaSalle windshields, side and back windows. To this feature of safety is now added Hi-Test Safety Plate Glass which does not shatter even when struck by a severe blow and is much clearer to see through, thus reducing eyestrain.

This new glass is standard in most windows of all new Cadillacs and LaSalles except for the curved back windows on LaSalle "Special," Cadillac 62 and Fleetwood 72. Tempered plate glass is used here.

Pleasure and safety of night driving are appreciably improved by new Sealed Beam Safety Headlights with Turn Indicators in Fender and Tail Lamps.

New rear door Safety Locks permit children to be carried safely in the rear compartment.



Extensive Driving Vision



Bowling Ball Cushioned by Hi-Test Safety Plate Glass



Safety Turn Indicator Lights



Safety Door Lock, Lever Type on LaSalle "Special," Cadillac 62 and Fleetwood 72

MAJOR POINTS OF CADILLAC-LASALLE COMPARISON

ENGINE	LaSalle "56" & Spec.	Cadillac "62" & "60S"	Cadillac Fleetwood "72" & "75"	Cadillac Sixteen
Design.....	90° V-type 8	90° V-type 8	90° V-type 8	135° V-type 16
Displacement.....	322 Cu. In.	346 Cu. In.	346 Cu. In.	431 Cu. In.
Bore and stroke.....	3 5/8" x 4 1/2"	3 5/8" x 4 1/2"	3 5/8" x 4 1/2"	3 1/4" x 3 3/4"
Brake horsepower.....	130 at 3400 R. P. M.	135 at 3400 R. P. M.	140 at 3400 R. P. M.	165 at 2600 R. P. M.
Taxable horsepower.....	26.45	30.20	30.20	67.00
Compression ratio.....	6.25-1	6.25-1	6.7-1	6.75-1
Synchro-Flex flywheel.....	No	Yes	Yes	No
Torsional vibration dampener.....	No	Yes	Yes	Yes
Wrist pin.....	Straight bore	Tapered bore	Tapered bore	Locked in rod
Carburetor size.....	1 3/4"	1 3/4"	1 3/4"	Two—1 3/4"
Fuel tank (capacity gals.).....	22	22	72-24	26.5
Type fuel required.....	Regular	Regular	Premium	Premium
Radiator core.....	Tube and fin	Tube and fin	Tube and fin	Copper Cellular
Cooling System (Capacity Qtcs.).....	23	24 1/2	24 1/2	20

ELECTRICAL SYSTEM

Current controlled and vol. reg. generator.....	Yes	Yes	Yes	Yes
Battery, Amps.....	115	115	115	125
Plates.....	17	17	17	19
Clutch diameter.....	10"	10 1/2"	11"	11 1/2"

MAJOR POINTS OF CADILLAC-LASALLE COMPARISON—Cont'd

	LaSalle "50" & Spec.	Cadillac "62"	Cadillac "40" Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
CHASSIS					
Wheelbase.....	125"	120"	127"	138"	141"
Overall length with bumpers.....	50—206 3/4" Spec.—211"	210"	217"	227"	7.5—228 1/2" 16—225 1/4" 60 1/2" 62 1/2" 8"
Tread, Front.....	58"	58"	58"	58"	58"
Rear.....	50"	50"	61"	62 1/2"	62 1/2"
Minimum clearance under axle.....	8 1/4"	8 1/4"	8 1/4"	8"	8"
Frame.....	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Rigid X Chassis beam
First serial number.....	50—2,320,001 Spec.—4,320,001	8,520,001	6,320,001	7,320,001	7.5—3,320,001 16—5,320,001
Knee Action coils.....	Enclosed by frame side bars	Enclosed by frame side bars	Enclosed by frame side bars	Enclosed by frame side bars	Outside frame side bars
Steering drag link.....	Parallel cross	Parallel cross	Parallel cross	Parallel cross	Longitudinal
Car turning radius—Right.....	21 1/2 ft.	23 ft.	24 ft.	23 ft.	23 ft.
—Left.....	21 1/2 ft.	23 ft.	22 ft.	22 ft.	22 ft.
BRAKES					
Brake lining area.....	106 sq. in.	208 sq. in.	208 sq. in.	233 sq. in.	258 sq. in.
Braking ratio—Front.....	54 1/2%	54 1/2%	54 1/2%	54 1/2%	57%
—Rear.....	45 1/2%	45 1/2%	45 1/2%	45 1/2%	43%
SHOCK ABSORBERS					
Front.....	End to end	End to end	End to end	End to end	End to end
Rear.....	End to end	End to end	End to end	End to end	End to end, manual adj.
Front stabilizer location.....	Forward of front susp.	Forward of front susp.	Forward of front susp.	Forward of front susp.	Rear of front susp.
Rear stabilizer.....	Cross link	Cross link	Cross link	Cross link	Cross link

MAJOR POINTS OF CADILLAC-LASALLE COMPARISON—Cont'd

	LaSalle "50" & Spec.	Cadillac "62"	Cadillac "60" Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Statens
REAR SPRINGS					
Length.....	54 1/2"	54 1/2"	54 1/2"	56 1/2"	62"
Width.....	2"	2"	2"	2"	2 3/4"
No. leaves.....	8	8	9	10	10
Shackles, type.....	Compression link	Compression link	Compression "U"	Compression link	Compression link
Bushings.....	All rubber	All rubber	Rubber front Threaded rear	All rubber	Rubber front and upper. Threaded lower
Rear axle ratio.....	3.92-1	3.92-1	3.92-1	4.31-1	7.5—4.58-1 16—4.31-1
Tires.....	7.00-16 4 ply	7.00-16 4 ply	7.00-16 4 ply	7.50-16 6 ply	7.50-16 6 ply
BODY					
Types.....	50—5 Spec.—4	4	4	6	12 in both series 75—2 Business
Construction.....	Fisher Unisteel	Fisher Unisteel	Fleetwood steel	Fleetwood steel	Fleetwood steel
Color options.....	14	14	14	10	10
Upolatory options					
Closed types—Cloth.....	50—4	6	6	4	7
Cloth.....	Spec.—6				
Convertible—Cloth.....	50—2				
Leather.....	50—6				
Single tone leather.....	52—5				
Two tone leather.....	52—3				
			Town Cars—4	Formals—7	2 4

MAJOR POINTS OF CADILLAC-LASALLE COMPARISON—Cont'd

	LaSalle "50" & Spec.	Cadillac "62"	Cadillac "40" Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
CHASSIS					
Wheelbase.....	122"	129"	127"	128"	141"
Overall length with bumpers.....	50—206 3/4" Spec.—211"	216"	217"	222"	75—228 1/2" 16—225 3/4"
Tread, Front.....	58"	58"	58"	58"	60 1/2"
Rear.....	50"	50"	61"	62 1/2"	62 1/2"
Minimum clearance under axle.....	8 3/4"	8 3/4"	8 3/4"	8"	8"
Frame.....	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Double drop rigid X 1-beam	Rigid X chained beam
First serial number.....	50—2,320,001 Spec.—4,320,001	8,320,001	6,320,001	7,320,001	75—3,320,001 16—5,320,001
Knee Action coils.....	Enclosed by frame side bars	Enclosed by frame side bars	Enclosed by frame side bars	Enclosed by frame side bars	Outside frame side bars
Steering drag link.....	Parallel cross	Parallel cross	Parallel cross	Parallel cross	Longitudinal
Car turning radius—Right.....	21 1/2 ft.	23 ft.	24 ft.	24 ft.	21 ft.
—Left.....	21 1/2 ft.	23 ft.	22 ft.	22 ft.	22 ft.
BRAKES					
Brake lining area.....	196 sq. in.	208 sq. in.	208 sq. in.	233 sq. in.	258 sq. in.
Braking ratio—Front.....	54 1/2%	54 1/2%	54 1/2%	54 1/2%	57%
—Rear.....	45 1/2%	45 1/2%	45 1/2%	45 1/2%	43%
SHOCK ABSORBERS					
Front.....	End to end	End to end	End to end	End to end	End to end
Rear.....	End to end	End to end	End to end	End to end	End to end, manual adj.
Front stabilizer location.....	Forward of front susp.	Forward of front susp.	Forward of front susp.	Forward of front susp.	Rear of front susp.
Rear stabilizer.....	Cross link	Cross link	Cross link	Cross link	Cross link

MAJOR POINTS OF CADILLAC-LASALLE COMPARISON—Cont'd

	LaSalle "59" & Spec.	Cadillac "62"	Cadillac "69" Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
REAR SPRINGS					
Length.....	54½"	54½"	54½"	56½"	62"
Width.....	2"	2"	2"	2"	2¾"
No. leaves.....	8	8	9	10	10
Shackles, type.....	Compression link	Compression link	Compression "U"	Compression link	Compression link
Bushings.....	All rubber	All rubber	Rubber front Threaded rear	All rubber	Rubber front and upper, Threaded lower
Rear axle ratio.....	3.92-1	3.92-1	3.92-1	4.31-1	7.5-4.58-1 16-4.31-1
Tires.....	7.00-16 4 ply	7.00-16 4 ply	7.00-16 4 ply	7.50-16 6 ply	7.50-16 6 ply
BODY					
Types.....	50-5 Spec-4	4	4	6	12 (in both series 75-2 Business Fleetwood steel)
Construction.....	Plater Unisteel	Fisher Unisteel	Fleetwood steel	2 Business Fleetwood steel	Fleetwood steel
Color options.....	14	14	14	10	10
Upholstery options					
Closed types—Cloth.....	50-4	6	6	4	7
Cloth.....	Spec-6		Town Cars-4	Formals-7	2
Convertible—Cloth.....	50-2				4
Leather.....	50-6				
Single tone leather.....	52-5	5			
Two tone leather.....	52-3	3			

Institutional

Bodies
Part
Series

Quinn, E. L., Social

Fleetwood 72-75 & Sixteen

At the receiving room every connecting rod forging is carefully tested for hardness and temper in accordance with metallurgical specifications.



This modern, multi-purpose machine rough bores cylinders and drills valve guide bushing holes for both banks of cylinders in one operation. Only from such efficiency in production is Cadillac able to provide highest quality at lowest cost to Cadillac-La Salle buyers.

Cylinder bores are checked for wall thickness in all directions with a magnetic gauge to insure uniform engine cooling.





Cylinder bores are graded into one of 30 different sizes with a special expanding gauge.

Pistons are likewise graded into 30 dimensional sizes. These two precision steps afford a selective fitting of piston-to-bore within a maximum variation of .00007 inches—about 1-40 the width of a human hair.



Balancing the crankshaft to $\frac{1}{16}$ ounce inch limit, after which crankshaft, clutch and flywheel will be balanced within a $\frac{1}{2}$ ounce inch limit.

Developed for and first used by Cadillac, this machine polishes all the lobes of the camshaft at once to an extremely smooth finish, which could not possibly be obtained by antiquated hand methods.



Accuracy of cam contours are carefully checked because of their importance to performance, with a micrometer and wheel graduated into minutes to simplify the reading of very slight irregularities on the cam surface.

The block test provides a carefully covered run in with special oil under constant pressure to remove all metallic particles and foreign matter, and to provide an opportunity for inspectors to check the operation of every part of the completed engine. This relieves owners of the tiresome 500 mile break-in so necessary in other makes of cars.



Briefly outlined and illustrated, these are but a few of the craftsmanship operations in every day use at the Cadillac factory. No mention has been made, for example, of transmission and rear axle construction or propeller shaft balance. Reference to precision is necessarily frequent on all of the following pages describing the detailed construction of all parts of Cadillac-La Salle cars because every skilled workman at the plant adheres conscientiously to Cadillac's motto, "Craftsmanship a Creed—Accuracy a Law."

GENERAL MOTORS CORPORATION

Bulwark Behind Cadillac Progress

Cadillac-LaSalle sales leadership is due in large measure to the administrative, engineering, and financial services rendered through Cadillac's affiliation with General Motors.

Largest in the industry, General Motors' very dominance alone lends prestige and buying confidence to people considering the purchase of a Cadillac or LaSalle. Through its own mechanical excellence and engineering superiorities, Cadillac in turn lends prestige and personnel ability to all other General Motors cars. For this very reason, it is of primary importance to the Corporation to insure the continued leadership of Cadillac in the fine car field.

Cadillac engineers are in constant contact with General Motors Research Laboratories, headed by one of the industry's most famous engineers, C. F. Kettering. Here hundreds of scientists and engineers, equipped



with the finest laboratory devices, are constantly striving to improve the development of the automobile. Cadillac uses these facilities as a consultant service to have their own specific developments investigated.

In addition to the table model and the drafting board, experimental Cadillacs and LaSalles equipped with new devices of all



General Motors Building, Detroit, Mich.

kinds, are continually being tested at the General Motors Proving Ground. New models are driven hundreds of thousands of miles over every conceivable kind of road and



under all weather and temperature conditions to determine any possible defect in design before being released for production. In addition, nearly all makes of automobiles, American and European, are purchased annually and subjected to comparative tests with General Motors cars. Only divisional engineers of the Corporation have access to the findings. They are totally unbiased for Proving Ground engineers are interested solely in facts, not in manufacturers. As an ethical policy, their reports can never be used for advertising or comparative sales presentation purposes.

Of equal importance to the Proving Ground for advancements in design is the Proving Ground of Public Opinion. The Customer Research Division contacts hundreds of thousands of automobile owners each year to determine what features they desire in their next cars. Cadillac designers are thus enabled to build Cadillacs and LaSalles *by and for* the people who purchase them. This guarantees a high public acceptance before new

models even leave the assembly line.



Style leadership and luxurious interior appointments for which Cadillac has always been famous, originate at General Motors Styling Section. Cadillac's own designers and

Customer Research make recommendations. The Styling Section puts these designs in concrete form, final approval resting with Cadillac.

The unsurpassed degree of Cadillac's manufacturing efficiency is the basis for such quality cars at low prices. Economies in mass purchasing and inter-divisional exchange of manufacturing experience afforded by General Motors are additional reasons for greater Cadillac-LaSalle price value.

In addition to product superiority, General Motors provides the Cadillac or La Salle buyer with an unequalled time payment plan. General Motors Acceptance Corporation is the only automobile finance company which is wholly an integral division of a manufacturer. Hence, the

**GENERAL
MOTORS
INSTALMENT
PLAN**

objective of G.M.A.C. is to do everything possible to assist in the sale of General Motors cars. For this reason G.M.A.C. has pioneered in the development of broader insurance coverage and lower combined financing and insurance costs, and has done most to make it possible for a greater number of people to purchase Cadillacs and LaSalles out of income. Furthermore, the reputation and financial security of General Motors remove purchasers' objection to possible lack of integrity of the financing company so that today a more inexpensive and stable time payment plan cannot be found.

With General Motors' assets totalling over one and one-half billion dollars, the future production continuance of Cadillac and LaSalle is definitely established.

Every Cadillac-LaSalle salesman has, therefore, all these decided sales advantages not available to the salesmen of cars manufactured by independent companies:

Extensive Research Facilities
Purchasing Economies
Manufacturing Advantages

Consumer Knowledge
Time Buying Service
Financial Security

"General Motors" Means "Good Measure"

Bodies All series

Cadillac Sixty Special

Fleetwood 72-75 & Sixteen

1940 CADILLAC-LA SALLE BODY DIMENSIONS

(See Pages 80 to 102 for Cadillac Sixteen Dimensional Drawings)

All dimensions in inches unless otherwise specified)	LaS. '58" 4-D. Tour.		LaS. '58" 2-4 Conv.		LaS. '58" 2-4 Conv.		LaS. '58" 3-4 Conv.		LaS. '58" 4-Door	
	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth
FRONT SEAT:										
Width (Hips).....	24 1/2	54 1/2	24 1/2	54 1/2	24 1/2	54 1/2	24 1/2	54 1/2	24 1/2	54 1/2
Width (Shoulders).....	35	55 1/2	35	55 1/2	35	55 1/2	35	55 1/2	35	55 1/2
Custom to floor.....	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2
Custom to roof.....	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2	37 1/2
Custom to dash.....	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2
Custom to clutch pedal.....	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2
Custom to steering wheel.....	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2
Seat back to steering wheel.....	14*	14*	14*	14*	14*	14*	14*	14*	14*	14*
REAR SEAT:										
Width (Hips).....	47	60 1/2	47	60 1/2	47	60 1/2	47	60 1/2	47	60 1/2
Width (Shoulders).....	55 1/2	62 1/2	55 1/2	62 1/2	55 1/2	62 1/2	55 1/2	62 1/2	55 1/2	62 1/2
Custom to floor.....	14 1/2	12 1/2	14 1/2	12 1/2	14 1/2	12 1/2	14 1/2	12 1/2	14 1/2	12 1/2
Custom to roof.....	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2	36 1/2
Custom to dash.....	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2
Custom to front seat back.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Seat back to front seat.....	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2	43 1/2
Seat back to front seat back.....	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2
Seat back to steering wheel.....	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2	35 1/2
Seat back to steering wheel.....	14*	14*	14*	14*	14*	14*	14*	14*	14*	14*
Overall length, hooded bumper.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Overall length, bumper to trunk and deck capacities (see C, 4-wheel).....	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2	17 1/2
Trunk and deck capacities (see C, 4-wheel).....	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2

All dimensions in inches unless otherwise specified)	48 Spec. 8-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan	
	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth
FRONT SEAT:										
Width (Hips).....	29	58 1/2	29	58 1/2	29	58 1/2	29	58 1/2	29	58 1/2
Width (Shoulders).....	38	60 1/2	38	60 1/2	38	60 1/2	38	60 1/2	38	60 1/2
Custom to floor.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Custom to roof.....	34	34	34	34	34	34	34	34	34	34
Custom to dash.....	27	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2
Custom to clutch pedal.....	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2
Custom to steering wheel.....	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2
Seat back to steering wheel.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
REAR SEAT:										
Width (Hips).....	35	51	35	51	35	51	35	51	35	51
Width (Shoulders).....	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2
Custom to floor.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Custom to roof.....	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2
Custom to dash.....	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2
Custom to front seat back.....	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2
Seat back to front seat back.....	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2
Seat back to steering wheel.....	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
Custom width.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seat back height.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seat back height to raised auxiliary seat back.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Front door width.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Front door height.....	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2
Overall length, hooded bumper.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Trunk capacity (see C, 4-wheel).....	31	31	31	31	31	31	31	31	31	31

All dimensions in inches unless otherwise specified)	48 Spec. 8-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan		48 Spec. 5-Tour. Sedan	
	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth
FRONT SEAT:										
Width (Hips).....	29 1/2	58 1/2	29 1/2	58 1/2	29 1/2	58 1/2	29 1/2	58 1/2	29 1/2	58 1/2
Width (Shoulders).....	38	60 1/2	38	60 1/2	38	60 1/2	38	60 1/2	38	60 1/2
Custom to floor.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Custom to roof.....	34	34	34	34	34	34	34	34	34	34
Custom to dash.....	27	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2
Custom to clutch pedal.....	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2	18 1/2
Custom to steering wheel.....	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2
Seat back to steering wheel.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
REAR SEAT:										
Width (Hips).....	35	51	35	51	35	51	35	51	35	51
Width (Shoulders).....	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2	43 1/2	51 1/2
Custom to floor.....	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2
Custom to roof.....	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2	30 1/2
Custom to dash.....	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2
Custom to front seat back.....	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2	14 1/2
Seat back to front seat back.....	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2	12 1/2
Seat back to steering wheel.....	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2	32 1/2
Custom width.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seat back height.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Seat back height to raised auxiliary seat back.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Front door width.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Front door height.....	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2	38 1/2
Overall length, hooded bumper.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Trunk and deck capacities (see C, 4-wheel).....	31	31	31	31	31	31	31	31	31	31

*With front seat in full retracted position. Front seat back rises 3" with 4" forward movement on Sixty Special and 7 1/2" on "58". (LaSalle Special, "58" and "57 1/2")

THE 1940 CADILLACS AND LASALLES

New Features and Improvements in Appearance, Interiors and Body Construction

NEW, MODERN IDENTITY IN FRONT ENSEMBLE

- New Veed Radiator Grilles
- Headlamps High in Fenders (LaSalles)
- Fender Parking Lamps with Turn Indicators
- New Fender Cooling Grilles
- New Bumpers

NEW, ULTRA MODERN BODY STYLING (LASALLE "SPECIAL"—CADILLAC 62)

- Steeply Back-Sloped Windshield
- Wider Doors
- Concealed Door Hinges
- Closed Rear Quarter
- Curved Rear Window
- Long Streamlined Trunk
- Beautiful New Tail Lamps

NEW STREAMLINED FLEETWOOD COACHWORK (SERIES 72)

- Wide, Steeply Sloped Windshield
- Chrome Window Reveals
- High, Wide Doors
- Concealed Door Hinges
- Streamlined Running Boards
- Large Quarter Windows
- Curved Rear Window
- Large Roomy Trunk

NEW LUXURIOUS INTERIORS

- Interior Color Harmony of:
 - Smarter Upholstery Fabrics
 - Clearer Vision Instrument Panel
 - Modern Garnish Mouldings
 - Floor Carpets
 - Hardware Decoration
- Seats Cushioned with Foam Rubber
- Safety Locks on Rear Doors (LaSalles, Cadillac 62, Fleetwood 72)
- Wide Vision Windows

GREATER RIGIDITY IN BODY CONSTRUCTION (LASALLE "SPECIAL", CADILLAC 62 AND FLEETWOOD 72)

IMPROVED BODY INSULATION FOR QUIETNESS AND COMFORT. (LASALLES, CADILLACS AND FLEETWOOD 72)

RETURN TO
TECHNICAL DATA FILES
DEPT. E-23

THE NEW 1940 LASALLES

APPEARANCE. Beautiful new styling characterizes the new LaSalles. Highly advanced styling, which combines every progressive feature of greater interior room, easier entrance and exit and more extensive vision with modern exterior beauty, insures greater public acceptance today as well as when these cars are traded in two or three years hence. This is Cadillac's styling policy which is largely responsible for more Cadillacs and LaSalles being sold above \$1300 last year than all other cars combined.*

LaSalle Fifty. The greatest fine car value ever offered—incorporates the major features of last year's popular LaSalle body with a new modern frontal design streamlined in every detail.

LaSalle "Special". America's most luxurious medium-priced car—features, in addition to the new frontal design, the *roomiest* body ever provided at medium price in an ultra-modern design.

FRONT VIEW—Fifty and "Special". Modern identity which has characterized every LaSalle since 1933 is provided in the very narrow die-cast radiator grille. Now the horizontal bars are more widely spaced and are veed at the center, forming a vertical line that accents narrow appearance. Across the front is the LaSalle name in white and gold script while the LaSalle crest appears in a neat design at the top.

Vertical openings in the front of the fenders, outlined by wide chrome strips, provide additional radiator ventilation and insure exceptional air inlet area.

Supplementing the modernism of the grilles are new fenders flowing smoothly into the sides of the hood

*Based upon R. L. Polk registrations, January through July, 1939 for all car makes with series having 5-Touring Sedans priced at or above \$1300.

and containing headlamps mounted high for better road illumination. (See page 125.) Long, chrome plated parking lamps above the headlamps add to the expensive and attractive appearance of the front ensemble. These lights are visible from all four sides of the car as an added safety feature and, in addition, contain turn indicator lights.



Unmistakable LaSalle identity in new, modern treatment

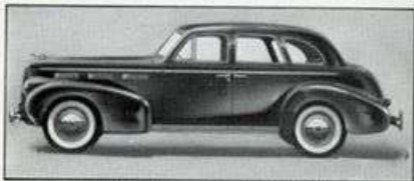
The distinctive LaSalle hood ornament, front opening hood, divided windshield and bright metal beading around the windshield add to attractive appearance.

The hood lifts with one easy upward movement and is held securely and automatically in its raised position by a spring. The Fifty has a central hood support and the "Special" has one on each side. A safety catch is provided in event the operator should fail to latch down the hood ornament.

New bumpers, having ends curved to blend with the fender contour, harmonize with the entire front design.

SIDE VIEW—LaSalle Fifty. Smooth curves and low lines are accented by headlamps high in the fenders, long parking lamps and new hood ports.

Costly chrome window reveals and chrome belt moulding extending from radiator grille to the trunk are fine car details. Running boards are optional. They are separated from the fenders to prevent collection of



The New, Longer, Lower La Salle Fifty

dirt and water. Without them three parallel stainless steel mouldings decorate the lower portion of the body and especially processed rubber guards protect the rear fenders from flying stones.

LaSalle "Special". The new front ensemble, increased 45-degree slope of the windshield and gradual tapering of the new body into the large streamlined trunk, produce a symphony of graceful lines and harmonious detail in this new LaSalle.



The New Ultra-Smart La Salle "Special"

All doors open from the rear. Door hinges are concealed for smooth appearance and reduced wind noise.

Windows are outlined with wide chrome reveals. There is no body belt moulding. Like the Sixty Special, an outward body flare forms a design highlight in the side view. Another flare in the body sill acts as a guard against dirt and flying stones. Running boards are optional and may be added or removed by the owner after purchase. When running boards are not desired, three stainless steel mouldings decorate the lower portion of the body and heavy rubber shields protect the rear fenders.

REAR VIEW—LaSalle Fifty. Unmistakable identity and beauty are provided by the flow of the body into the fenders and into the exceptionally roomy trunk. The license plate is carried in the center of the trunk lid



*Smooth contours
of LaSalle Fifty rear
quarter enclose
a large trunk*

below a new emblem which bears the LaSalle crest on a colored background with bright chrome "V" outline. Another feature is the LaSalle name in script across the center of the stylishly curved bumper. Tail lights provide side as well as rearward illumination. They also contain turn indicator lights.

LaSalle "Special". Unique and distinctive style note of the new LaSalle "Special" is its round contoured rear quarter which encloses a large roomy trunk. The large, undivided rear window is also curved to conform with the body outline.

The rear license, centrally located on the trunk lid, is illuminated by a light concealed in the trunk lid handle. Above is the attractive new LaSalle "V" emblem.

Body lines flow into the smooth fenders in a neat smooth curve. Mounted low on the body inside each fender are distinctive new tail lamps containing directional signals.



A long streamlined trunk distinguishes the LaSalle "Special"

LARGE STORAGE SPACES. Trunks and rear decks on all LaSalle's are carpeted and walls are covered with neatly tailored heather cloth. Floors are level. An interior light is provided. Cubic foot capacity is 17.4 for the Fifty sedan and 2-door sedan, and 16 for the Special sedan. All styles also have separate, lid enclosed tool compartments.

NEW LASALLE INTERIORS

APPEARANCE AND APPOINTMENTS. Completely new, harmonious color ensembles are featured in all new LaSalle. Now for the first time a strictly high-priced custom car option is offered in the medium-priced LaSalle. Instrument panel, garnish mouldings and plastic trim are matched with optional upholstery fabrics with the result that much gayer, better styled interiors are realized.



All new Sedans, including LaSalle Fifty have a deep center arm rest

The Fifty is trimmed in one of four cloth options of ribbed broadcloth or two-tone cords. The "Special" has four tan and two gray options including two-tone cords, herringbone weaves, Bedford cloth and plain broadcloth. Instrument panels are finished in Seaforth beige with tan fabrics or Hermes gray with gray fabrics.

Steering wheel, horn button, light switch knob and other plastic parts, including even the new hardware plastic, are finished in light shades of tan or gray. Robe

cord, assist straps and windcords are lace covered in one of two harmonizing colors. The leather top front door arm rests and the floor carpeting are colored to



Luxuriously appointed LaSalle "Special" rear interior

match the trim. The "Special's" floor carpets have a third shade—green-gray—to blend with its green-gray two-tone cord.



*Richly carpeted,
clear front floor*

Heavy pile carpeting is used on the rear compartment floors. The front floor carpet consists of pile

inserted into a thick rubber base, the rubber being uncovered at points where greatest wear normally occurs.

New garnish mouldings in individual and distinctively modern design for the Fifty and "Special" have a



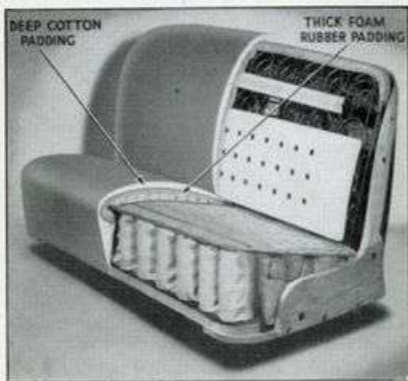
Spacious LaSalle "Special" front compartment

two-tone color in tan or gray to carry out the interior theme. A new interior overhead light is located in the center of the roof on sedans and closed coupes and over the rear seat on models equipped with Sunshine Turret Top. All sedan types have rear seat center arm rests and side arm rests. Ash receivers are provided in Fifty rear side arm rests and one in the center of the "Special" front seat back.

COMFORT AND ROOM. All new Cadillacs and LaSallees have foam rubber padded seat cushions. Improved construction over previous designs consists in LaSalle of Luxury springs covered with a new heavy foam rubber pad which in turn is covered with a thick cotton pad. Foam rubber adds a soft cushion to the springs while the cotton holds the rubber from exces-

sive quivering and also keeps the seat cushions cool.

In legroom, headroom and seat width dimensions, the Fifty body is larger than most bodies on longer wheelbase cars. This is made possible by the compact V-type engine which requires less chassis length than comparably sized straight 8's. See page 112.



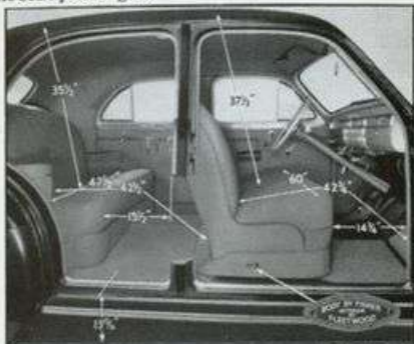
New seat cushions feature restful comfort

The new LaSalle "Special" is larger still. Seats are six inches wider in front and floors are lower than last year, increasing headroom and ease of entrance. In fact, the front seat is so wide that, were it legal, *four* persons could ride with as much comfort as three on the front seat of some cars.

Complete interior dimensions for all LaSalle body types are shown on page 30.

Individually controlled no-draft ventipanes are provided in front door windows of the Fifty and in both front and rear door windows of the "Special". Each ventipane has a theft-proof lock. Also, the "Special's"

rear door ventipanes have wind deflectors on the inside of the division bar to insure freedom from draft on front seat passengers.



Ease of entrance and roomy dimensions of the new LaSalle "Special"

EASE OF ENTRANCE AND EXIT. Entrance into the new Fifty is made easy by a low step from the ground

*New LaSalle Fifty
features easier
entrance and exit*



to floor, high, wide doors and extensive space between door pillars and seat cushions.

In the new "Special", entrance ease is even greater. Floors are considerably lower, facilitating entrance especially on cars not equipped with running boards. By hinging rear doors at the front, greater door width is afforded which further improves entrance.

INSTRUMENT PANEL. In addition to its harmonious color options to match interior trims, the instrument panel has many improvements for easier visibility day or night. The basic safety design of a smooth curved surface and recessed controls is unchanged.

In the center is a beautiful chrome grille of vertical triple spaced bars. When the new Cadillac radio is ordered, it is installed behind the center of this grille. A large ash tray is concealed in the right side and, when pressed on the bottom, pivots outward exposing a large removable tray.



New, smoothly curved, easier to read instrument panel

The new instrument group directly in front of the driver has a curved speed indicator for easier reading. The electric clock, standard equipment at the right of the glass enclosed panel, has radial lines leading to its numbers. A new rheostat light switch provides any desired degree of instrument illumination for better visibility at night.

A die cast panel finished in chrome below the grille carries a beautiful LaSalle or Cadillac crest flanked on each side by gold wings. The illuminated ignition lock, the starter push button, hand throttle and cigar lighter are chrome finished and curved to conform with

the panel. They are plainly marked for identification at a glance.

The glove compartment, enclosed in the extreme right panel, is lighted automatically when the door

*Richly lined,
automatically
illuminated
glove compartment*



opens. The large compartment is beautifully tailored in cloth and the inner side of the door is neatly finished. A spring lock is provided. These are quality details exclusive to LaSalle in its class.

All controls including the speedometer reset and cowl ventilator handle, are within the driver's easy reach.

LOCKING SYSTEM. Both front doors on all models have outside locks so that the driver may enter from either side. Inside locking buttons or levers make it possible to lock and leave the car without the inconvenience of using the key, necessary in some other cars.

New rear door safety locks make it impossible for rear doors to be opened from either inside or out. By locking rear doors with the button in the garnish moulding on the Fifty or locking lever on the door panel of the "Special", both inner and outer door handles are allowed to turn freely. Small children can now ride alone in the rear compartment in perfect safety. This feature is also available for LaSalle "Special" front doors on special order.

SUNSHINE TURRET TOP. Available on LaSalle Fifty Two-Door Touring Sedan and Touring Sedan at small additional charge. Sunshine Turret Top greatly in-



LaSalle Fifty with Sunshine Turret Top

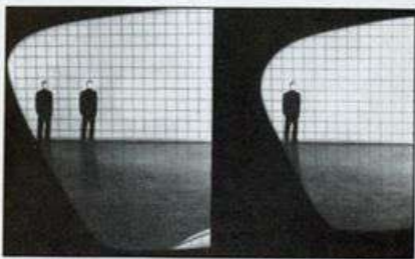
creases interior ventilation and is much appreciated in warm weather. It is especially desirable for touring through scenic country.

VISION AND SAFETY. Outward vision from windshield and all windows of the new Fifty continues to be equal or superior to all other similarly priced cars. The new "Special" also features an extensive breadth and height of outward vision. Comparative glass areas in square inches are:

	FIFTY	"SPECIAL"
Windshield.....	767	744
Both front door windows.....	827	617
Both rear door windows.....	600	621
Both rear quarter windows....	354	
Back window.....	336	428
Total Glass Area—Sq. In.....	2884	2410

More important than areas is the position of the glass, design of the doors with narrow pillars and the height of seats relative to the windows in both models.

Thus, while the "Special's" windshield is smaller in total area than the Fifty's, its extreme 45-degree slope and three inches greater width result in a comparable amount of vision. Similarly, the rear seat



Visibility comparison between LaSalle Fifty and ordinary car windshields

location and greater size of rear door windows provide extraordinary vision for these passengers. Large as is the Fifty's back window, the "Special's" is still larger, affording extensive rearward vision for safety.

Safety Plate Glass is used in all windows and windshields of all 1940 Cadillacs and LaSalles. This is a ground and polished glass furnishing almost perfect clarity. Most other cars use ordinary laminated sheet glass in door windows and even in windshields of some models.

Safety plate glass, in comparison with laminated sheet glass, has remarkable characteristics of reducing eyestrain and permitting accurate judgment of distance. Recent tests prove that laminated sheet glass produces 62% greater eye fatigue than Safety Plate Glass. In contrast to Safety Plate, sheet glass makes headaches 140% more frequent, symptoms of tiredness and sleepiness 17% more common and ability to judge

distance 81% less accurate. As a result of these tests, it is obvious that Safety Plate Glass is indispensable to today's standards of motoring safety and comfort.



Safety Plate Glass (left) gives clearer vision from all angles than laminated sheet glass (right)

One of the greatest safety developments for 1940 arises from new Hi-Test Safety Plate Glass. This is an entirely new laminated glass in which a layer of plastic is sandwiched between two panes of polished plate glass. This plastic is the result of years of research to find a substance which is extremely elastic and which will cushion the force of objects striking the glass; a substance to which the smallest particles of glass would stick tenaciously when cracked. This new plastic has these two features to such a degree that a 16 lb. bowling ball dropped from a height of 6 ft. will

not smash through a pane of Hi-Test Safety Plate Glass, nor will any of the cracked glass particles fly.

Hi-Test Safety Plate Glass is used in the windshield, door and quarter windows of all LaSalle Fifty body types, LaSalle "Special" and Cadillac 62 sedans, and all Fleetwood 72 body types. It is used throughout on all Sixty Special, Fleetwood 75 and Sixteen types as well as LaSalle Convertible types.

In addition, new Tempered Plate Glass is used in back windows of LaSalle Fifty and "Special", Cadillac 62 and Fleetwood 72. This glass will withstand very heavy impacts and extreme pressure without cracking and is best suited for being curved to afford additional vision and a new style treatment in these new models.

EXTRA EQUIPMENT AND ACCESSORIES

Cadillac offers many items of special equipment and accessories expressly designed under the supervision of its Engineering Department for the 1940 Cadillacs and LaSalle. At moderate additional charge, this equipment greatly increases the pleasure, comfort and safety of Cadillac-LaSalle ownership. (See page 175 for price list.)

AUTOMATIC RADIO. The 1940 Cadillac Automatic Radio for all new models incorporates many outstanding improvements and innovations in design and performance which combine to make it the finest in motor car radios on the market today.

Dependability under all conditions has been the objective in the development of the new radio. This has been accomplished by extremely rugged construction and simplification of working parts. Also, the set is so compact that it can be installed behind the instrument panel center grille in a very few moments without disturbing any other units on the car.

Only the attractive dial, selector buttons, and manual controls of the radio are visible to passengers. (See Instrument Panel on page 44.) The dial light is on the main instrument panel lighting circuit and may be graduated from dim to bright with the panel's rheostat light switch. This improves visibility at night.

The automatic tuning selector mechanism has been greatly simplified for more positive operation. The first of the seven operative buttons (from left to right) is an on-off switch which is used to turn the set on and off. A small light on the dial glows red when the radio is on to serve as a warning to the driver when he leaves the car. The next five buttons provide instantaneous tuning to five pre-selected stations. A further selection of stations is obtained by using the manual control at the right of the radio dial. For additional ease of operation, automatic volume control is so efficient that it permits tuning from one station to another without adjustment of the manual volume control (at the left of the dial) except in rare instances.

The seventh button at the extreme right is a 3-position tone control to provide very soft, moderate or very sharp reproduction. A new 8-inch dynamic speaker reproduces full natural tones from extreme bass to high treble.

Despite the many improvements, current consumption has been reduced more than twenty per cent.

The vacuum-controlled aerial has also been extensively redesigned both from a mechanical and electrical standpoint to produce the most efficient and desirable antenna unit for 1940. The aerial, inconspicuously mounted on the left side of the cowl, may be extended twenty inches by vacuum and another twenty inches manually to produce excellent reception of even the more distant stations. It is available for all new Cadillacs and LaSalles. Under-running board aerials are

available as optional antenna equipment only on Cadillac Fleetwood 72, 75 and Sixteen.

IMPROVED HEATERS. Cadillac offers three types of heater equipment for 1940, each having greater heating and defrosting capacity than any other type of car heater.

A Defrosting Heater and a Ventilating Defrosting Heater with three-speed reversible motors are available for all models. The Ventilating Defrosting Heater has a fresh air inlet from a scoop on the right side of the cowl which keeps the car interior well ventilated with a healthful atmosphere when windows are closed and prevents mist from collecting on windshield and windows.

In addition, there is a revolutionary new Dual Ventilating Defroster Heater for all closed sedan types.



New heating and ventilating system

This unit is not just a heater as has been commonly thought of in the past but a *heating and ventilating system* exclusive to 1940 Cadillacs and LaSalle's which provides uniform, healthful warmth throughout the entire car.

The new system includes *two* heating units mounted on the car floor under the front seat and a separate defroster with its own heating core and fresh air inlet for ventilation.

Just as a furnace is located in the center of a house and a factory is heated from a central source, the dual heaters under the front seat force heat forward and rearward within the car.

Each heating unit and the defroster has its individual motor and two-speed switch. The fresh air valve also has a separate lever. These four controls are combined into a control unit mounted on the lower left edge of the instrument panel. The driver has within easy reach a variety of controls to secure practically any combination and degree of heating, defrosting and ventilation desired within the car. Among these many unique combinations is the pleasant sensation of cool, fresh, invigorating air around passengers at breathing level while the heaters keep the body and legs warm.

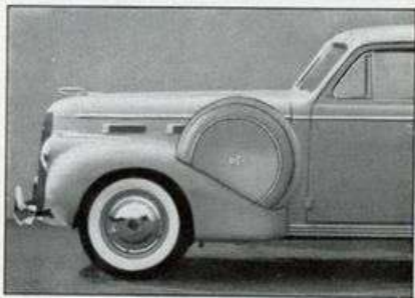
NoRol. This feature, operating between the clutch and foot brake, holds the car on an upward incline, preventing it from rolling backward and leaving the right foot free to operate the accelerator. As the clutch is engaged the NoRol is released automatically. The motoring public's experience with this extraordinary driving convenience is leading to its general adoption in hilly sections of the country. Even in more level country, grades at railroad crossings and street intersections have resulted in widespread use of the NoRol.

WINDSHIELD WASHER. An invaluable aid for removing dirt and insects collecting on the windshield, the washer draws water from a reservoir and sprays it on the windshield through nozzles in the cowl.

ADDITIONAL LASALLE BODY STYLES

LaSalle Fifty is also available in a 5 Two-Door Touring Sedan, 5 Convertible Sedan, 2-4 Coupe and 2-4 Convertible Coupe as well as the 5 Touring Sedan. Both coupes now have full-across auxiliary seats behind the divided front seat. The convertible sedan has a large trunk similar to the closed sedan.

Convertible types have six leather trim options, including black, tan, gray, green, blue and red colors. Tan or gray ribbed broadcloth is also available.



LaSalle Fifty with fenderwells

Six wheel and fenderwell equipment is available at extra cost on all LaSalle Fifty body styles.

In addition to a 5 Touring sedan, LaSalle "Special" is available in a 2-4 Coupe with full-across auxiliary seat. Both Fifty and "Special" trunks and rear decks are standard equipped with interior lights operating automatically when the lid is raised and the headlighting system is on.

Two new youthfully smart convertible types are available in the LaSalle "Special." In addition to the low, ground-hugging modernity of the closed styles, the new convertible coupe and convertible sedan, especially with their tops lowered, excel the sport cars of the past in smart, spirited appearance.



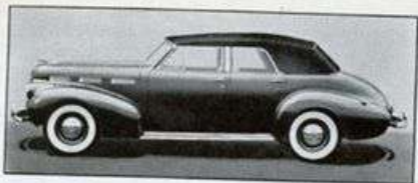
The new LaSalle Special Convertible Coupe

Several distinctive features, heretofore available only on strictly custom cars costing many thousands of dollars, are introduced by Fleetwood in these new LaSalle "Special" convertible styles.

There are eight interior trim options, each of which serves as a basis for a harmoniously blended interior color scheme. Two tone trim combinations are offered for the first time. Red, blue or green leathers may be combined with buff leather. These trim options in addition to the single tone leather trims make possible any personal preference for a truly distinctive car. When red, blue or green leather is ordered the instrument panel and the floor carpeting are in a blending shade of the same color. Windshield and window mouldings are chrome.

The Convertible Coupe interiors are appointed with a dome light on the rear roof bow and ash receivers recessed on both right and left side walls for the convenience of passengers on the full-across rear seat. A rear view mirror in addition to the customary type, is mounted on the left I. C. V. frame.

Another outstanding feature of the convertible coupe is its All-Weather Power Top which may be raised or lowered automatically by pushing or pulling



The new LaSalle Special Convertible Sedan

the control knob located below the instrument panel at the driver's left. A clever spring balance and vacuum created in two large cylinders placed in the right and left rear body quarters provide power operation. Vacuum is built up by a piston in each cylinder. The piston is driven by intake manifold pressure. The system is similar, on a larger scale, to that which operates the windshield wiper and vacuum radio aerial.

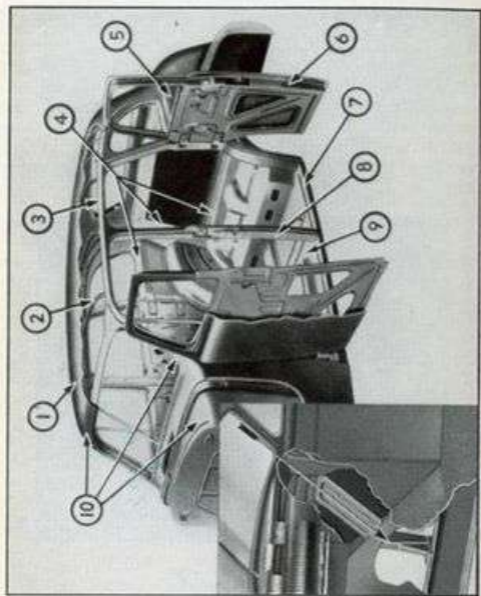


Richly appointed interior of the LaSalle Special Convertible Coupe

The Convertible Sedan has all of the features of the closed sedan, such as spacious trunk and rear seat center arm rest. In addition, there are courtesy

lights on each side of the front seat back operated manually by a switch on the left rear arm rest and automatically by the right rear door. An ash receiver and automatic lighter are recessed in the center of the front seat back.

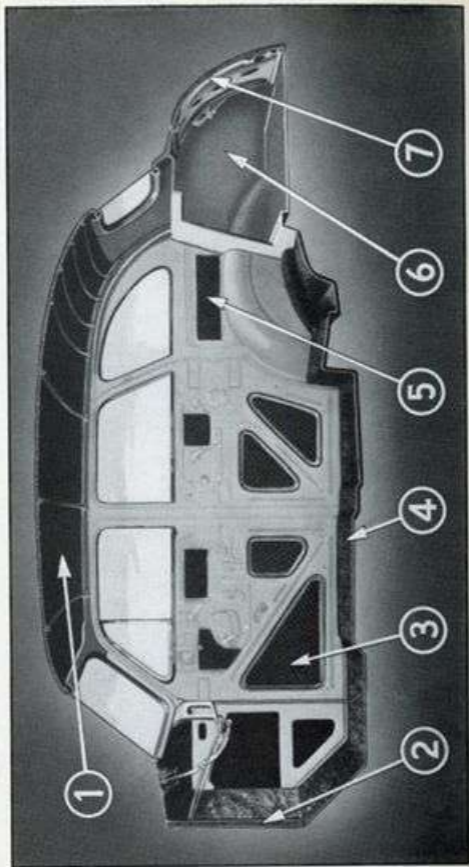
These two welcome additions to the LaSalle "Special" line further increase the market coverage and available earnings for LaSalle salesmen.



LASALLE UNISTEEL TURRET TOP BODIES

Passengers Ride Within a Tube-Like Unit of Steel

1. One-piece solid steel top; permanent, beautiful.
2. Sturdy "U" shaped steel roof bows.
3. Steel roof rail welded to inner steel body framework.
4. Steel braces welded to sides of inner body structure joined by heavy steel cross member below rear window frame.
5. Steel body panels welded together.
6. Steel door panels reinforced with steel.
7. Steel rocker panels welded to sides of underbody.
8. Two "U" shaped steel bars welded together form each pillar post.
9. Steel floor welded integral with body.
10. LaSalle Fifty cowl structure one complete unit of reinforced dash, windshield posts and header panel welded to Turret Top. LaSalle "Special" has, in addition, new one-piece cowl and toe board. Also cowl structural support extends in straight line from front body bracket to windshield pillar for extreme strength and rigidity. (See inset above.)



IMPROVED INSULATION

LaSalle's Steel Bodies are Insulated at Every Point for Quietness and Comfort

1. Turret Top has finest combination of heat, cold and sound insulation available: thick pad of asphalt impregnated felt; large dead air space; heavy wool headlining matches upholstery.
 2. Dash covered with thick jute pad and celotex board—cemented to finish panel for extra protection against engine heat. LaSalle "Special" one-piece cowl-toe board construction and covering of asphalt saturated felt provide additional heat insulation.
 3. Door panels lined with asphalt impregnated felt.
 4. One-piece steel floor scientifically indented to deaden sound. Floor tightly fitted with heavy layer of impregnated felt to which is added a thick pile carpet.
 5. Rear quarter panels lined with asphalt impregnated felt. Dead air space provided. Interior side wall of heavy wool cloth matching upholstery.
 6. Inner sides and back of trunk lined with heather cloth.
 7. Trunk lid covered with thick pad of felt impregnated with asphalt.
- Heavy insulating rubber pads interposed around body bolts prevent any metal-to-metal contact between body and frame, thus eliminating body rumbling inherent in cars with single unit frames.

WEATHER-PROOFING AND SEALING

LaSalle bodies are effectively sealed from dust, water and drafts. Doors, sills, windows and ventilators have rubber lacings and heavy weather stripping. Windshield is tightly sealed by a plastic cement applied between the body channel, rubber gaskets and glass.



*Roof mouldings
and ventipane shields
protect passengers
from dripping
water*

Steel drip mouldings are welded to the sides of the Turret Top and down the sides of the windshield pillar posts. These prevent annoying dripping water upon passengers entering or leaving the car. Drip shields over each front ventipane extend far down the front of the opening and permit the ventilators to be opened enough for ventilation during a rain.

Tubular wind seals used in the door frames assure draft free interiors during cold weather.

The screened cowl ventilator is tightly sealed by a rubber gasket carried in the rain trough to prevent water from seeping into the front compartment. An overcenter locking mechanism is operated by giving the control handle an additional pull after closing the

ventilator. This keeps the cowl ventilator securely closed to prevent leakage and drafts and in addition renders anti-theft protection.

All floor openings around the foot pedals are carefully sealed against heat and cold. Rubber seals fit tightly around the pedals. Heavy pile carpets on both the front and rear compartment floors provide additional protection as well as richer appearance.

When so equipped, running boards are separated from the fenders at both ends. This prevents the accumulation of water and dirt which dampens and soils shoes and floor carpeting. Every attention has been given the new LaSalle to make them soundproof and weatherproof.

BONDERIZING AND FINISHING

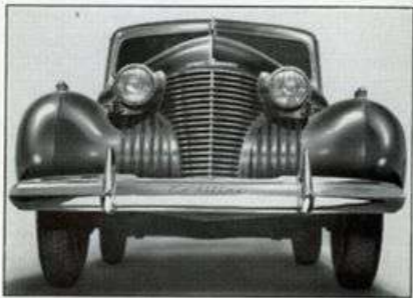
The enduring lustre of Cadillac-LaSalle's beautiful finish is due in large measure to the chemical process of bonderizing. By treating all sheet metal and fenders with this bath a primer is provided to the clean, bare metal which prevents chipping, cracking and peeling of the lacquer from shock and vibration. Bonderized protection is many times more rust resisting than finish applied directly to the metal surface, yet this process is rarely used by even other fine car makers.

Extreme care is taken in the finishing process to avoid thin spots and fading of any of the fourteen new Cadillac and LaSalle color combinations. Six coats are each applied separately both up and down and across the surface for thorough, even thickness and coverage.

After each coat the finish is allowed to bake thoroughly in specially designed air tight rooms under even temperature. It is then oil sanded and polished. Each of these four steps is taken before one coat of paint is completed. Skilled inspectors measure paint thickness with special gauges to insure uniformity.

THE 1940 CADILLAC SIXTY-TWO

MODERN DIGNITY IN FRONTAL APPEARANCE. All new Cadillac V-8's are particularly distinguished by the new frontal ensemble which identifies them to be of Cadillac lineage. The sharply veed center die cast radiator grille, the harmonious curve of fenders and fender cooling grilles flowing into the hood side panel have a graceful effect likened to the prow of a yacht cleaving the surface of the water.



Modern front ensemble identifies all Cadillac V-8's

Long streamlined parking lamps are mounted on the fenders and contain turn indicators. Headlamps are moulded into the hood side panels. They contain new Sealed Beam Safety Lighting units (see page 125).

Unusually attractive heavy bumpers harmonize with the new frontal styling. The neat script lettering of the "Cadillac" name is in effective contrast with the bright chrome of the bar.

SIDE VIEW. Greater overall length, the new frontal treatment and new streamlined body give the Sixty-Two a long, low, sleek appearance wholly its own. Modern low lines are further emphasized by the in-

1940

CADILLAC-BUILT V-TYPE ENGINES

NEW FEATURES and IMPROVEMENTS

Smoother Performance	All V-8's
Increased Fuel Economy	All V-8's
New Carburetor	LaSalles
New Vacuum Advance Distributor	All V-8's
Improved Intake Manifold	All V-8's
Greater Horsepower	LaSalles
New, Higher Capacity Fuel Pump	All V-8's
Quieter Exhaust Muffling	All Series
New, High-Output Peak Load Generator	All Series
Smoother, Quieter Starter Engagement	All V-8's
Improved Radiator Ventilation	All V-8's
Smoother Clutch Action	All Series
Easier Shifting	All Series

For major points of V-Type engine comparison see page 14

CADILLAC V-TYPE ENGINE DESIGN

Only Inherently Correct Design for Engines of Eight or More Cylinders

Cadillac has concentrated on V-type engines for twenty-six years, utilizing this principle in engines of eight, twelve, and sixteen cylinders. All speed and endurance records on land, on sea, and in the air are held by V-type engines. Their compactness, rigidity and efficiency are unequalled wherever motive power is required.

As early as 1922, the eminent automotive engineer, C. F. Kettering, said, "With the unlimited funds and vast resources of the General Motors Corporation at my command, were I assigned the task of building another truly fine motor car engine where the size of the engine required of itself eight or more cylinders, it must needs be of the V-type design."

More costly to build than in-line types because of the necessity for expensive, specialized machinery to manufacture angle-spaced banks of cylinders, Cadillac has utilized the vast resources and funds of General Motors and its own unparalleled experience to bring the present Cadillac-LaSalle V-8's and the Sixteen to unrivalled peaks of performance, smoothness, economy and long life.

ADVANTAGES OF 90 DEGREE V-8 DESIGN. A 90 degree V-8 engine has six exclusive advantages not obtainable in engines of straight eight design:

- Smoother Operation
- More Efficient Carburetion
- More Uniform Cooling
- More Efficient Lubrication
- Greater Allowance for Body Room
- More Economical and Longer Lived

SMOOTH OPERATION. In a V-8 with cylinders paired at ninety degrees, or at right angles to each other, the inertia force built up within one cylinder is completely offset by the equivalent inertia force of the opposite cylinder. One force counteracts or neutralizes a second equal force when they meet at the crankshaft. Therefore, main bearings have no work to do other than to support the weight of the crankshaft and to absorb reactions from explosions within the cylinders. This cancellation of inertia forces in a 90 degree V-8 engine may be easily demonstrated with a yardstick. Push down on one end of the yardstick with one hand and push up from below at the same point with the other hand. Obviously, nothing happens because one force cancels the other.



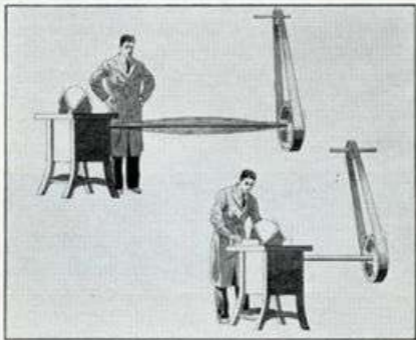
Forces cancel one another

Unequally spaced forces cause yardstick to bend

In the case of a straight eight engine there is no pairing of cylinders. The front cylinder balances the rear cylinder of the engine, consequently to cancel each other, the inertia forces must be transmitted from one end of the crankshaft to the other. This increases crankshaft and crankcase stresses, increases the work which main bearings have to do, and by increasing crankshaft deflection, causes the typical straight eight high speed vibration. This may be demonstrated by pushing down on one end of the yardstick and up on the other end. The stick bends in the middle.

Work which main bearings must do has been accurately measured by Cadillac engineers. Taking a Cadillac V-8 engine and a typical straight eight engine of practically identical cubic inch displacement they

found that the total average maximum load or pressure imposed upon the three V-8 main bearings is 173 pounds per square inch, and on the five straight eight bearings 791 pounds per square inch. Five small bearings having no greater area must do five times the work of three large bearings. Operating smoothness, dependability and long life is obviously greater in Cadillac V-type engines.



A long driven shaft has far more whip than a shorter shaft

A V-type eight cylinder engine is, by comparison with an eight-in-line engine, a twin four. Hence it is much shorter and more compact. Given two engines of equal cubic inch displacement, the straight eight crankshaft must be longer than the V-8 crankshaft. The V-8 crankshaft, being short and of large diameter, is much better able to withstand stresses imposed upon it by explosive forces of the engine and centrifugal forces set up by rapid crankshaft revolutions. This is an additional factor in longer life and smoothness.

Power forces react upon every crankshaft causing a rapid, alternate twisting first in one direction, then in

another. At certain speeds this causes torsional vibration. The short, rigid Cadillac or LaSalle V-8 crankshaft is but negligibly affected by these twisting forces while the long shafts of the straight eight engines are seriously affected. This may be demonstrated with an ordinary desk ruler. A yardstick may also be used to show even more clearly the result of twisting forces on



One-half ruler twist

Full ruler twist

the crankshaft. First, hold one-half the ruler's length and twist in opposite directions with each hand. Note how much resistance is offered to the twisting force. Now try the same procedure, using all the ruler's length. This demonstrates the effect of forces developed in a straight eight engine upon the crankshaft.

At all speeds, explosive forces within any engine tend to make the crankshaft bend. Again, the short ruggedness of the V-8 crankshaft resists this bending tendency to a far greater extent than is possible with a



One-half ruler snap

Full Ruler snap

long, thin straight eight crankshaft. To demonstrate, hold the ruler on the desk with one-half of its length projecting over the edge. See how rigid the ruler re-

mains when attempts are made to snap it. Now extend the overhang of the ruler until as much of its length as possible projects over the edge of the desk. Its end may be snapped much more easily. The twisting and snapping tendencies of the crankshaft during engine operation are, of course, in small fractional measurements, but relatively slight deviations from its true, predetermined position create extreme engine vibrations. The short, rigid crankshaft of the Cadillac-LaSalle V-8 engines holds these deviations to a far lower amount than it is possible to attain with the long crankshafts of any straight eight engine. Shortness of the crankshaft in addition to inherent cancellation of inertia forces, makes the Cadillac-built 90 degree V-8 engines smoother and quieter to operate, and also provides longer, more dependable engine life than any straight eight powered automobile.

EFFICIENT CARBURETION. With V-type design Cadillac engineers are able to centralize carburetor location above and between the two cylinder blocks. The carburetor's central location permits equal distribu-

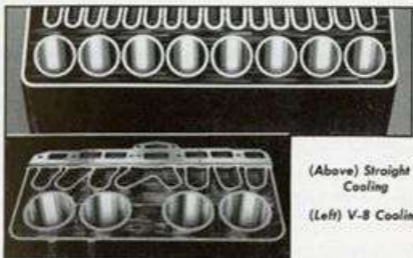


V-8 Equalized Manifold

Straight 8 Unequal Manifolds

tion of fuel mixture to every one of the eight cylinders. The farthest cylinder is only about half the corresponding distance from the carburetor than it is in straight engines. This eliminates the need for long intake manifolds in which vaporized fuel has time to condense.

POSITIVE COOLING. In the Cadillac-built V-8 engines, water enters the right-hand cylinder block under pressure. Half of the water is by-passed to the left-hand block. Thus, the maximum distance that cooling water must travel through the block is far less and the variation in temperature throughout the engine is about half of that in a straight eight engine. In straight eights water enters the block at the front and must travel the full length of the engine before cooling the rear cylinder. Cooling effectiveness obvi-



(Above) Straight 8
Cooling

(Left) V-8 Cooling

ously diminishes as water passes from front to rear of the engine. This results in hotter running rear cylinders, causes uneven cylinder temperatures, and, therefore, enhances the danger of warping cylinders and valve seats which results from unequal heating. Lubricating quality of the oil is reduced and oil consumption increases under wide variances in temperature.

The compactness of V-type design also permits a greater water cooling area around cylinders and valves. Because of the great length of a straight eight engine, which must be fitted into a limited space, water areas must be restricted in size and cooling efficiency is lost.

V-type design lends itself admirably to efficient

cooling system operation with resultant operating economies and longer engine life.

EFFICIENT LUBRICATION. Three large main bearings each having greater surface area, retain oil longer and are easier to lubricate than any one of the five or more small bearings of the eight-in-line crankshaft.

There are other lubrication advantages inherent in V-type design. Oil conduits throughout the engine are shorter, reducing danger of plugged oil passages. Oil is directed under pressure through drilled holes in the crankcase removing the danger of engine failure from broken oil lines where a piping system is used.

Due to the shortness of the V-8 crankcase, positive lubrication is assured, regardless of the steepness of the road or of rapidity of deceleration. The oil pump inlet is always on the oil surface. When straight eight engines operate on grades or decelerate from high speeds the oil flows to one end of the crankcase which may result in the engine being oil starved.

Because of its compactness the short V-type eight requires fewer camshaft bearings. This further simplifies the lubricating system, insures dependability, and decreases operating costs.

BODY ROOM. Cadillac V-type design permits an engine of greater size and power output than a straight



A V-type engine is about six inches shorter than a straight 8 of equal size

eight to be placed under much shorter hood length, leaving greater room for interior body dimensions. A V-8 engine is about six inches shorter than a straight 8 engine of equal size.

One outstanding superiority of the new 1940 LaSalle is their efficient use of body space. The V-8 engine is the principal factor which makes this economy of space possible. A wheelbase as much as five or six inches longer would be necessary if a straight 8 engine of equal size were used.

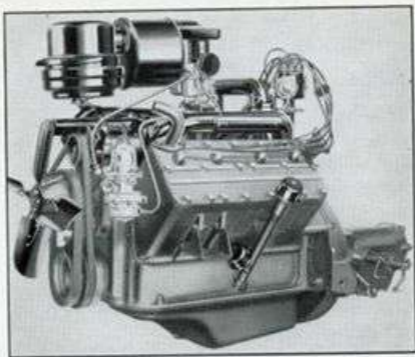
If it were attempted to produce a straight eight engine with similar displacement in a short engine space, the bore would have to be small and the stroke long. This would result in very high piston speeds with consequent increased wear and decreased engine life. Should the bores be widened and the stroke shortened, more engine space would be required. To accommodate such an engine, hood length would have to be increased and passenger space decreased even more than in the present straight eights.

OPERATING ECONOMY AND LONGER ENGINE LIFE.

The preceding five exclusive advantages inherent in V-8 engine design secure economies in gasoline, oil, service and repairs over all straight 8 engines of comparable size.

In an attempt to offset these design weaknesses, some straight 8 manufacturers have resorted to over-drive gearing and charge customers extra for these devices. These cannot approach the fundamental superiorities of inherently correct design for engines of eight or more cylinders—superiorities which in Cadillac-LaSalle engines are attained even without reference to Cadillac excellence in manufacture.

FEATURES OF V-8 CONSTRUCTION



Cadillac-built 90° V-8 engine for LaSalles

AIR INTAKE. Oil bath air cleaner standard equipment. Filters all air before it enters carburetor, insuring dirt free fuel mixture. This elimination of air impurities prevents scoring of pistons and cylinder walls.

Air rushing into cleaner passes over reservoir of oil, creating mist. Much of the dirt is held on surface of the oil in reservoir and balance is caught by filtering element. All dirt adhering to filter is washed into reservoir by oil mist. Filter is kept clean and constantly efficient. Oil bath type cleaner is, therefore, more effective in handling large quantities of dirt than conventional wire mesh type.

BATTERY. 17 plate, 115-ampere hour capacity. Used on all Cadillac V-8's and LaSalles. Battery terminals are self-opening, reinforced by steel insert. This design reduces corrosion and prevents breakage.

On LaSalles, Cadillac 62 and Fleetwood 72 battery located underneath left front floorboard. On

Fleetwood 75, and Sixty Special underneath the right front fender.

BEARINGS. See Camshaft below, Connecting Rods, page 118. Main Bearings, page 129.

BORE AND STROKE. LaSalle V-8's: $3\frac{3}{8}$ " x $4\frac{1}{2}$ "; all Cadillac V-8's; $3\frac{1}{2}$ " x $4\frac{1}{2}$ ".

CAMSHAFT. Case hardened steel forging driven by silent chain from crankshaft. Assembly counter-weighted to insure balance during operation. This insures high speed smoothness.

Chain drive is far superior to any type or material of gears because it is stronger, quieter and reduces wear.

Bearings are steel-backed for strength and lubricated directly through passages in crankcase. Only three are necessary because of compact V-type design.

CARBURETORS. Dual downdraft carburetors are used on all Cadillacs and LaSalles. Ideally located above center of engine vee for more positive equal distribution of fuel mixture by intake manifold. Chokes are operated by temperature from the exhaust manifold. They are simple, positive in action and provide smooth engine operation when cold.

A new carburetor for LaSalles incorporates several new developments which promote fuel economy and increase LaSalle's engine to 130 horsepower.

Carburetor throat diameter has been increased to $1\frac{1}{4}$ inches giving a better balanced fuel and air mixture. This increases power.

A vacuum metering system has been developed which meters fuel according to the amount of acceleration desired. This permits a leaner fuel mixture increasing mileage without affecting engine performance. Accelerator pump jets are entirely redesigned to

give much faster, action when throttle is opened.

Another new development is an internal vent in the float bowl. For years Cadillac-LaSalle carburetors have



*New Carburetor for
LaSalle*

been designed to reduce the tendency of gasoline to boil when the warm engine is stopped. In conventional carburetors this boiling action creates gas bubbles

*Improved
Cadillac V-8
Carburetor*



which "percolate" upward through the fuel nozzle and discharge raw gasoline into the intake manifold which handicaps starting. The new internal vent in these carburetors permits any such gas bubbles to escape.

The development of this vent is the result of extensive research in the high temperature wind tunnel, a testing technique first used for vapor lock research by Cadillac.

An improved carburetor for all Cadillac V-8's is also especially designed to eliminate vapor lock tendencies at high driving temperatures. By a special design of fuel chamber, the chamber completely encircles the carburetor throat. Evaporation of gasoline in the air stream passing down the throat cools the fuel stored in the chamber. Smoother, faster performance and more economical operation is attained in hot weather.

Metering jets are smaller in size increasing fuel economy without affecting power.

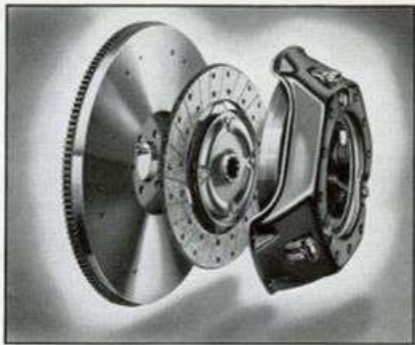
CIRCUIT BREAKER. Used in the electrical system to prevent damage to the system from any current overload. Should this occur, the heat generated causes the unit to break the circuit. As soon as temperature of the unit returns to normal the unit closes itself automatically. Fuses are eliminated.

CLUTCH. Semi-centrifugal, single dry plate design for all Cadillacs and LaSalle's. Eight coil spring vibration dampeners insulate drive line from engine pulsations. Permanently lubricated clutch throw-out bearing. Woven facings and extremely rigid cover plates promote long life.

New driven disc, made of special spring steel cut into waved segments, acts as a cushion to give smoother clutch engagement. New design is much lighter. This effects a reduction in clutch spinning time which makes gear shifting easier and faster.

COMPRESSION RATIOS. 6.25 to 1 for LaSalle, Cadillac 62 and 60 Special. 6.7 to 1 for Fleetwood 72 and 75.

CONNECTING RODS. Strong, light weight carbon steel. Angle split for quick removal through top of cylinder



Improved Clutch

bore. Bearings are steel-backed babbitt. Connecting rods rifle drilled for positive wrist pin lubrication.

Cylinder bores are cross lubricated. Rods of right-hand cylinder block lubricate bores in left block and



*Rifle Drilled
Connecting Rod*

vice versa. With each revolution of the connecting rod, oil is squirted through small hole in rod's big end. Such positive lubrication essential to prevent piston-to-bore wear in a cold engine. Another exclusive feature only obtainable in V-type design.

Each piston, connecting rod, bearing and wrist pin assembly balanced to closest precision limits of $\frac{1}{32}$ of an ounce for perfect running balance and smoothness.

CRANKCASE VENTILATION. Velocity suction design for all V-8's. More positive than other road draft types now in use. Its higher efficiency is maintained throughout life of the car. The usual unsightly road draft pipes are within the engine. Air enters the oil

Crankcase Ventilation System



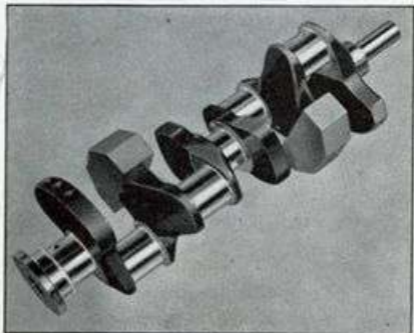
filler pipe through its air cleaner at the base of the oil filler pipe and thoroughly ventilates the crankcase. Air, carrying the vapors with it, then passes upward into the valve tappet compartments and is led rearwardly into a passageway cored behind the engine rear bulkhead and ahead of the flywheel. This passageway leads downward to the bottom of the engine to which is secured an outlet fitting discharging the gases beneath the car. Damaging unburned fuel vapors and moisture, which would otherwise collect in the crankcase, score cylinder walls and bearing surfaces, and dilute lubricating quality of the oil, are positively sucked out at all car speeds.

CRANKSHAFT. Carbon steel forging. Weight 90 lbs. Length 27 in. over main bearings. More rigid for its length than any crankshaft used in other passenger car

808
engines. Extreme shortness avoids tendencies to whip or vibrate, characteristic of long straight 8 shafts.

Balanced to $\frac{1}{16}$ ounce-inch limit and again with flywheel and clutch attached to $\frac{1}{2}$ ounce-inch limit.

Large diameter bearing journals and $\frac{1}{4}$ in. overlap of these journals and crankpins are additional features of rigidity. Use of six counterweights gives each crankshaft cheek its own counterweight. This contributes to smoothness and balance.

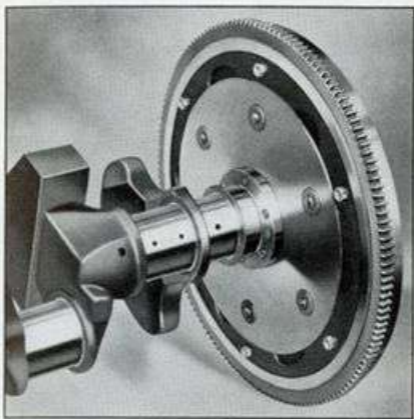


Short, Rugged Crankshaft

Synco-Flex Flywheel. On all Cadillac V-8 engines. A Cadillac "First." Provides silky engine smoothness exceeded only by the Sixteen.

In the Synco-Flex design the cast iron flywheel rim is attached to the crankshaft by a flexible disc. When the engine is run at speeds at which certain crankshaft vibrations invariably occur, the flexibility of the disc permits the cast iron flywheel rim to run in a true circle regardless of crankshaft deflection. If the crankshaft deflects, however, the dampening plates rub against the flexible disc, thus

absorbing or dampening the motion of the crankshaft just as the vibration of a violin string is dampened if the finger is placed upon it.



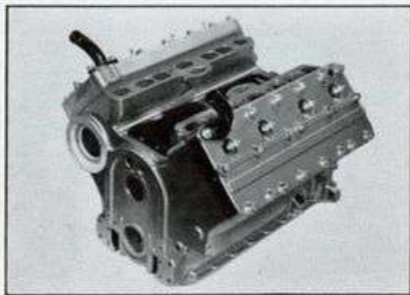
Syncro-Flex Flywheel

All Cadillac V-8's also have a torsional vibration dampener on the crankshaft. While torsional or twisting vibrations are characteristic of crankshafts in all sixes, straight eights and V-12's, they are for all practical purposes eliminated by the short crankshaft of V-8 design engines. The dampener is used on Cadillac solely as an additional refinement to a more powerful engine.

CYLINDER BLOCK AND CRANKCASE. Cast in one mold from hard, especially prepared alloy of steel and iron. The en bloc casting is then placed in an "equalizing oven" to season the metal by slow cooling to normal temperature. An engine foundation is thus

secured which holds its original dimensions permanently. Other manufacturers use such soft, inexpensive cylinder block iron that the material will not resist the hammering of valves in their seats, hence valve seat inserts have to be used.

Additional features of great strength result from shortness, greater width and compactness made possible by V-type design. A boss, or column, extends from the center of each cylinder block top face to the crankcase which ties the unit firmly together.



V-8 Enbloc Cylinder and Crankcase

Cylinder wall thicknesses are carefully checked in all directions with an electric gauge. Cylinder walls are carefully honed which imparts a smooth, glass-like finish. This increases piston and ring life, minimizes scoring possibilities, promotes even cooling and, therefore, increases engine efficiency and long life.

Each bore is measured with an electric expanding gauge and graded into one of thirty sizes. Pistons are likewise weighed and graded into thirty sizes. This permits an exact selective fitting of piston-to-bore to .00007 inch variation in clearance. Such precision insures maximum operating efficiency of the engine.

CYLINDER HEAD. Cast of same material as block to insure uniform expansion of both units when heated. Avoids leaks and gasket troubles possible in engines with heads of different material than the block.

DISPLACEMENT. LaSalle engines, 322 cubic inches. All Cadillac V-8 engines, 346 cubic inches.

ENGINE SUPPORTS. See Mountings, page 130.

EXHAUST MANIFOLD. See Manifolds, page 130.

FAN. LaSalle, Cadillacs 62 and Sixty Special have four fan blades. Fleetwood 72 and 75, six blades. Fan rotates on permanently sealed double row ball bearing which never requires lubrication. Driven by single belt and pulley. Water pump and generator driven by separate belt and pulley. This two-belt arrangement increases belt life. In event of breakage only one engine cooling unit is out of operation.

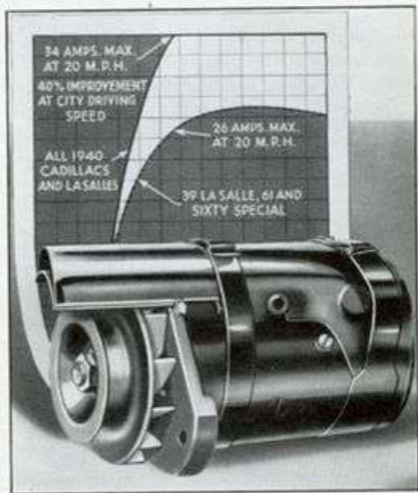
FILLER CAP. Built-in pressure valve reduces loss of water or anti-freeze caused by boiling. Water cannot boil off until it is heated to 230 degrees F. Boiling over action is thus prevented entirely or delayed. Bayonet type fastener has a vent which eliminates danger of pressure overflow when cap is removed.

FUEL PUMP. Fuel fed through air-cooled lines along frame side bars to pump located in front of left-hand block behind fan. Silent diaphragm construction. Water and all impurities filtered and deposited in detachable glass bowl.

In addition to cool location, other improvements have been made to minimize still further vapor lock tendencies. This is result of extensive wind tunnel research at high temperatures. Pump capacity has been increased as much as 25%.

FULL LENGTH WATER JACKETS. See Water Jackets, page 140.

GASOLINE ECONOMY. New carburetor, rearranged intake manifold and new vacuum spark advance increase LaSalle gasoline economy up to $1\frac{1}{2}$ miles per gallon. Improvements in Cadillac V-8 engine economy are also obtained. New Cadillac and LaSalle are equal to or more economical than all other cars of similar size and power.



New, Higher Capacity Generator and Output Comparison

GASOLINE TANK CAPACITIES. LaSalle, Cadillac 62 and Sixty Special—22 gals.; Fleetwood 72, 24 gals.; 75, 26.5 gals. Mechanical gasoline gauge is improved to give a steady indicator reading.

GEARSHIFT. See Syncromatic Shift, page 134.

GENERATOR—NEW PEAK LOAD DESIGN. Employed on all Cadillacs and LaSalles. Located in engine vee directly behind fan. Now both voltage regulated and current controlled. Higher, 34 ampere maximum charging rate above 20 m.p.h. Generator now has greater capacity at both low and high speeds than has ever been provided in passenger cars.

Voltage regulator automatically adjusts generator charging rate according to the electrical load and battery condition. Battery is thus kept at its peak load without danger of overcharging and insures longer battery life.

Current control feature, new on LaSalles, Cadillac 62 and Sixty Special maintains the charging rate regardless of car speed as shown in the above diagram. Without current control the charging rate reaches a peak at about 50 m.p.h. on most cars and then falls off even though the electrical load may be heavy and battery in a low stage of charge.

Glass insulated armature winding, another new feature, greatly increases generator efficiency and armature life. Generator is kept exceptionally cool by its location behind fan, by its air intake pipe and by its own fan built into its pulley. Cooling prolongs life and enables the generator to charge at a higher rate.

HEADLIGHTING SYSTEM—NEW SEALED BEAM DESIGN. New, uniform headlighting system is the result of long development instigated by General Motors Corporation, and carried out through complete cooperation of headlamp manufacturers and law enforcement officials of the several states. This cooperation is unique in automotive history.

45-35 watt bulb, reflector and lens sealed as a unit. Located in fenders on LaSalles and molded into

hood side panels on all Cadillacs. New design has longer life, produces better night driving vision and reduces glare.



New "Sealed Beam" Headlighting System
Driving Lights *City and Passing Lights*

With Sealed Beam design, bulbs are maintained in proper relationship with lens and reflector. Also they have longer life. Should a bulb be burned out or broken the entire unit may be replaced. This assures maintenance of the original accurate focus adjustments and prevents otherwise unavoidable reflector deterioration. A clean, bright finish on the reflector is always maintained. Wattage in each headlamp is increased 47% for much better lighting.

The switch for parking and headlamps is located on the instrument panel at the left of the steering column. When pulled out to the first position, parking lights are on. In the second position, bright headlights are on, a choice between upper and lower beams being made by a foot switch to the left of the clutch pedal. The upper beam is indicated by a red signal in the speedometer face. Because this beam throws much more brilliant light far down the road, it is imperative that the lower beam be used when other cars approach.

Parking Lights and Turn Indicator Signals. New feature, standard equipment on all models. Parking lights are located above the headlights on the LaSalle. On Cadillacs they are mounted on the fenders.

Parking lights and tail lights on all models contain directional signals controlled by a switch on the steering column. The switch has a red signal which flashes when signal lights are on. Right front

*Convenient Control for
Turn Indicator Lights*



and right rear signals flash on and off for making a right turn. The left front and left rear signals flash for a left turn. Their extra brilliance and flashing feature make them easily distinguished at night above the continuous lighting system.

HORNS. "Sea Shell" type horns are used on all Cadillac V-8's and LaSalles. These have short die cast bells and are mounted under the hood on the hood cross brace by laminated springs to prevent transmission of vibration to the body.

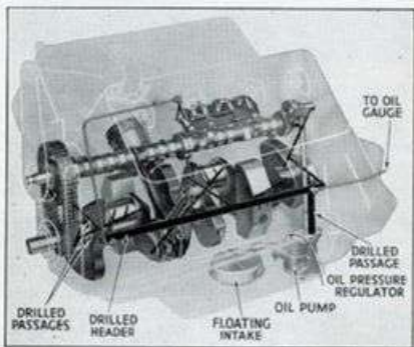
HORSEPOWER. LaSalles, 130; Cadillac 62 and Sixty Special, 135; Fleetwood 72 and 75, 140.

HYDRAULIC VALVE SILENCERS. See Valve Mechanism, pages 137 and 138.

IGNITION SYSTEM. New Vacuum Advance Distributor. Operating from the intake manifold this device advances or retards the spark automatically according to the amount of acceleration desired. More complete fuel combustion is obtained which greatly improves fuel economy.

INTAKE MANIFOLD. See Manifolds, page 129.

LUBRICATION SYSTEM. Full pressure lubrication provides oil positively to every moving part of the engine including wrist pins and cylinder bores—two points lubricated by splash in some engines. Oil travels



Full Pressure Engine Lubrication System

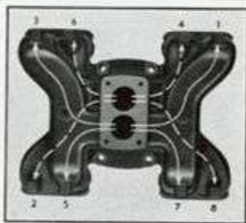
through drilled passages in the crankcase. Only piping in entire engine is to hydraulic valve silencers and to oil pressure gauge on instrument panel.

A large gear type pump is located at the rear of the engine. Oil enters pump through a screened float intake shaped like an inverted cup. This intake floats on the surface and draws only the clean oil. As oil level rises and falls the float moves up and down with it. The shortness of the oil pan because of compact V-type engine design prevents oil starvation even on steep grades. Also the intake opening is so large that even though oil is thick and cold it is drawn into pump. A regulator built into pump maintains correct pressure. Oil pan capacity is seven quarts.

MAIN BEARINGS. Due to the inherent cancellation of inertia forces in 90 degree V-type design, main bearings have no work to do other than support the crankshaft and absorb combustion forces. Hence, only three are necessary. These are rigidly backed and babbitt-lined. They have very wide surface areas which retain oil longer than five, seven or nine small bearings. Three bearings are more easily aligned and more accessible than are those in many straight 8's.

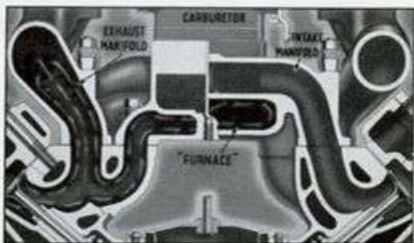
MANIFOLDS. Two separate intake manifolds cast into one unit insure equal manifold distances from carburetor to all cylinders and equal fuel distribution. Reduces possibility of condensation of gasoline in manifold, such as occurs in long straight manifolds. Unique Cadillac feature exclusive to V-type design.

*Equalized
Manifold*



Important improvement in this design for 1940 arises from mounting the intake manifold parallel to the ground. Ordinarily it is mounted parallel to the engine axis which is higher at the front than at the rear. With the new horizontal manifolds power impulses are more uniform, giving smoother performance. More complete fuel combustion is obtained for greater power, faster cold starting and better fuel economy.

Exhaust manifold features "hot plate economizer" which also assists in fullest possible use of fuel. Hot exhaust gases are led under and applied to underside of intake manifold. This direct heat immediately vaporizes any raw gasoline which may have dropped through to the intake manifold.



Cross Section of Intake and Exhaust Manifolds showing "Hot Plate Economizer"

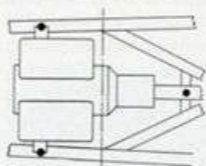
Exhaust lead off is forward of right hand cylinder block on LaSalle, Cadillac 62, Sixty Special and Fleetwood 72 engines. Exhaust piping is on right hand side of chassis. On Fleetwood 75 the lead off is from the left side of the engine and the exhaust piping system is outside the left frame side bar for much of its length. This location keeps heat away from body.

MOUNTINGS. One important reason for Cadillac-LaSalle smooth engine performance and handling stability is the design and location of three live rubber engine supports. Two at the forward sides of the engine on the frame side bars. One at the rear of the transmission extension. These supports permit engine to rock freely and utilize engine weight to steady the frame. Engine aligns itself with frame like a three-legged stool.

Forward supports are rubber cushions. Rear support consists of two parts; a compression cushion and a

rebound cushion. The first counteracts downward thrusts of engine caused by power forces. The second absorbs reactionary upward movement of engine's weight and insulates engine tremor from frame.

*3-Point, Live
Rubber Engine
Supports*



MUFFLERS. Sturdy, corrosion resistant construction of three-pass design is many times more durable than conventional mufflers.

Double wrapped steel outer shell treated with corrosion resisting material. Supported at each end by sound-deadening insulators. In addition, Fleetwood 75 and Sixty Special mufflers have corrosion resisting resonators to insure quietness in these larger models.

1940 improvements include reduction in back pressure which increases high speed power. Two tuning chambers are now used for a quiet, smooth exhaust tone.

Fleetwood 75 and Sixty Special mufflers are mounted transversely to the frame behind the gasoline tank. With right-hand exhaust piping, the Sixty Special tail pipe is on the left rear of the chassis. On Fleetwood 75 with left side exhaust piping the tail pipe is on the right.

PISTONS AND RINGS. Anodized aluminum alloy, T-slot pistons with four ferrox treated rings. Precision hand fitting of piston and rings. Anodizing is a costly electro-chemical bath treatment which gives gem-like hardness to light weight aluminum. Greater strength and less wear and scuffing are secured than with other

types of treatment. Anodized treatment is permanent throughout life of the car. T-slot assures uniform expansion and contraction of piston which permits it to fit evenly and correctly within cylinder bore. This is superior to invar strut type which rigidly holds the piston at four points and results in uncontrolled and unequal expansion at other points.



*Anodized
Aluminum Alloy,
T-Slot, 4-Ring
Piston*

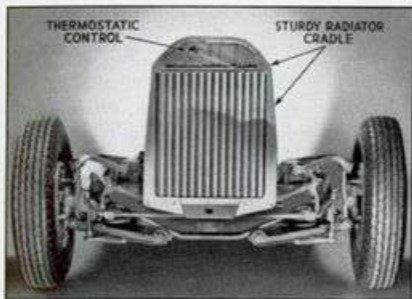
Four ferrox treated rings—two oil and two compression—give better oil economy and greater cylinder bore durability. Ferrox treatment is abrasion resistant and provides longer ring life. Four rings insure better compression and oil economy than is possible with three rings.

Wrist pins are precision made and tested to one-one hundred thousandths inch variation and are hand fitted. Cadillac V-8 engines have wrist pins with tapered ends permitting maximum strength at pin centers with minimum weight.

Pistons and cylinder bores are separately measured and graded into thirty sizes. This permits an exact selective fitting of piston-to-bore to seven-one hundred thousandths inch variation in clearance. Such precision in engine building is exclusive to Cadillac and LaSalle.

RADIATOR CORE. Tube and fin construction long recognized as exceptionally sturdy and capable of carrying high internal pressures. More nearly "leak proof" than any other core yet designed for pleasure cars. Cooling efficiency is also greater because the core is only $3\frac{3}{8}$ inches thick and has $9\frac{1}{2}$ tubes per inch.

With high internal pressure, boiling point of cooling liquid is 230 degrees F. which greatly reduces evaporation and saves anti-freeze.

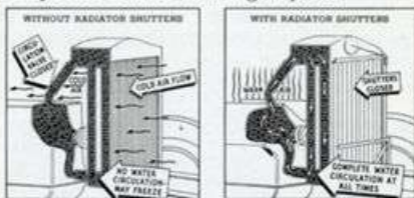


Automatic Radiator Shutters

RADIATOR SHUTTERS. Thermostatically regulated. Automatically provide water temperature control. Improves carburetion and crankcase ventilation by maintaining uniform underhood temperature. They also keep the front compartment warmer in winter by excluding cold air.

With the commonly used circulation type of thermostat, water in the engine is kept warm by circulation of water through the engine alone, and not through the radiator. Flow of air through the radiator is unrestricted. Cooling fluid may freeze even when engine is running. Low underhood air temperatures cause

carburetor frosting in winter. The cold air entering the carburetor requires a richer mixture, decreasing fuel economy. Also causes condensation of moisture on crankcase walls which forms sludge, dilutes engine oil and may score or wear vital engine parts.

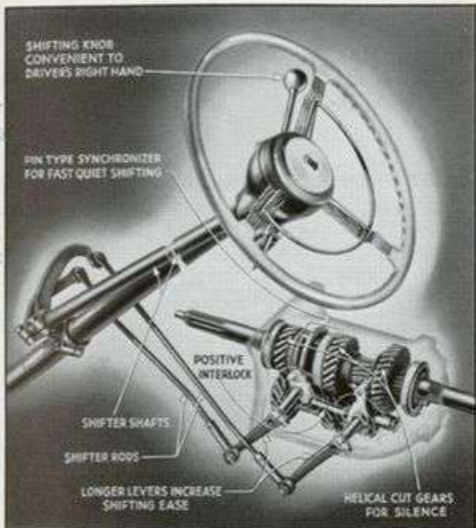


In Cadillac or LaSalle, water is free to flow from the radiator into the engine and back into the radiator at all times as soon as the engine starts. The shutters gradually open as the engine approaches normal operating temperature. When closed they prevent the flow of air through the radiator thus eliminating the need for anti-freeze in the cooling fluid while running.

SOLENOID STARTER. Starter button on instrument panel engages solenoid. This acts as a magnet causing positive engagement of starter pinion with flywheel *before* the starter itself operates. This action relieves starter gears of all shock loads and provides long life. Several changes in gear teeth design secure a smoother sliding engagement and quieter operation. As a safety feature, starter engagement cannot be made unless ignition switch is on.

SYNCHRO-FLEX FLYWHEEL. See Crankshaft, page 120.

SYNCHROMATIC SHIFT. Now almost universally copied by others since introduced by Cadillac two years ago, Synchromatic Shift is still exclusive in its mechanical simplicity and operating efficiency. It provides faster,



Synchromatic Shift and Syncro-Mesh Transmission

quieter, easier handling than any other type of steering post gearshift. There is no extra charge for Synchromatic Shift.

Shifting is accomplished by a short lever projecting to the right below the steering wheel hub and convenient to the driver's right hand. Movement of the shifting lever actuates either of two shafts, one within the other, which extend down nearly parallel to the steering column. They are colored to match the column. The shafts connect with levers which in turn engage shifter rods passing into the transmission. One shaft operates for low and reverse gears, the other for second and high.

Worthwhile improvement for 1940 arises from increased length of the shifting levers. The longer levers increase shifting ease 37% for low and reverse, 20% for second and high. Construction is even sturdier to eliminate the effect of road shock on the assembly and to reduce friction which still further increases shifting ease.

SYNCHRO-MESH TRANSMISSION. All gears helical cut for silent operation. Individually checked and matched into sets by hand. Also individual soundproof room test for perfect running quietness. Built to highest standards of precision craftsmanship known to industry. Many times more durable according to actual fatigue test than any other transmission known to Cadillac engineers.

Transmission interlock, located between shifter shaft hubs just inside transmission case, positively prevents engagement of more than one gear at a time.

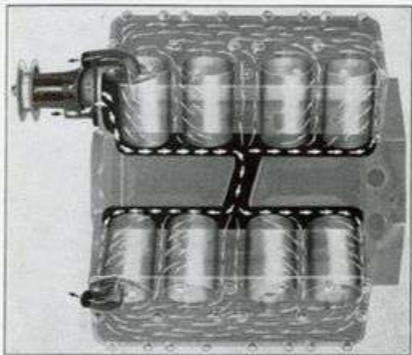
Pin type synchronizer further assists shifting smoothness. Most effective design yet developed for matching gears before actual engagement takes place because it is not affected by weather or climatic conditions. Fast, clashless shifting may be made at all times.

Overdrives or other automatic transmission devices, used on some cars, are necessary because their small engines must be run at high r.p.m. to secure performance. By reducing engine speed on the highway, economy and engine life is improved. The extra cost owners must pay for these devices more than offsets any small improvement in economy claimed for them.

Cadillac, however, prefers to use large engines sufficiently powerful for performance under all conditions, and runs these engines at low r.p.m. by means of low standard rear axle ratios. Performance, long engine life and economy are all secured. Transmission complexity and maintenance expense are avoided.

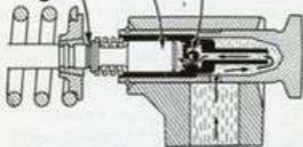
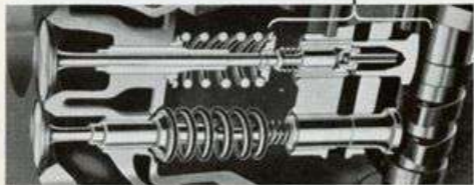
VALVE MECHANISM. L-head design. All tappet bodies ferrox treated, as are piston rings, to prevent camshaft and tappet base scoring.

All sixteen valves maintained in constant accurate adjustment by hydraulic valve silencers. These costly instruments have an accuracy of precision in manufacture equivalent to world's most expensive watches. Valve silencers eliminate tappet noise frequent in all engines without them, particularly those of overhead valve design. Also, by maintaining accurate valve tappet clearance, they eliminate 75% of the cause for valve grinding. Inaccurate clearance also causes overheated valves and seats, loss of power and increased fuel consumption. With but two exceptions Cadillac and LaSalle are the only cars under \$4000 equipped with these owner-saving instruments.

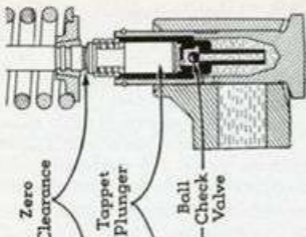


Complete and Uniform Water Circulating System

WATER CIRCULATING SYSTEM. Cadillac V-type design lends itself to more simple, uniform cooling than is possible in straight eight engines due to their much longer cylinder blocks.



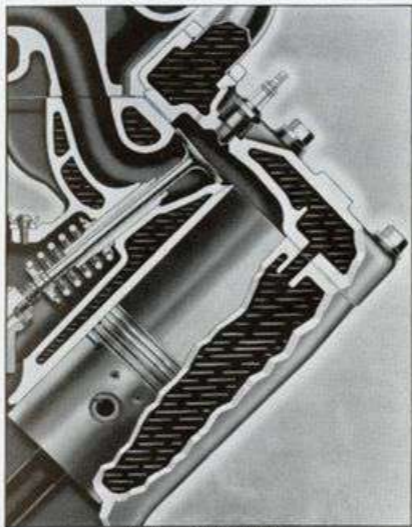
When the valve is closed oil is forced by the engine's lubricating system in around the ball check valve. This oil pressure holds the toppet firmly against the valve stem. Clearance is zero and the valve is in accurate adjustment.



When the valve opens the ball check valve prevents oil from escaping again insuring zero clearance. A controlled oil bleed around the toppet plunger compensates for valve expansion maintaining accurate adjustment.

HYDRAULIC VALVE SILENCER OPERATION

Water is drawn through a short hose connection from the bottom of the radiator tank to the pump. From here it is forced under high pressure directly into the right hand cylinder block. Half of the water passes through the right hand block, then upward to the cylinder head. The other half is forced through a center passage in the engine to the left hand block. This simplified system requires only three hose connections.



Full Length Water Jackets

Water pressure, provided by the size and location of holes in the cylinder block, directly cools valve seats. Additional piping, common in other engines, is eliminated. Because the Cadillac-designed cooling system

promotes thorough cooling of valve seats, valve seat inserts are unnecessary.

WATER JACKETS. Full length water jackets provide uniform cooling over entire length of the cylinder walls and, therefore, insure an equal expansion of the cylinder barrels in all directions. Cylinders remain true and full compression is retained after years of hard usage.

A second important advantage is the reduction in engine oil temperature as a result of the engine's cooler operation. Lubrication qualities of the oil are retained much longer.

WATER PUMP. Impeller type. Easily accessible by being built into the front of the right hand cylinder block. Automatic packing adjustment is provided whereby the packing is held by a regulating spring and the hydraulic pressure of the lubricating grease. This prevents leakage from faulty packing adjustment and eliminates service expense.

1940

Chassis Series

Detail Specifications

1940

CADILLAC-BUILT CHASSIS



NEW FEATURES and IMPROVEMENTS

LONGER WHEELBASES . . . LaSalles, Cadillac 62

IMPROVED CONTROLLED-ACTION RIDE . All Series

NEW, RIGID FRAMES . . . LaSalles, Cadillac 62,
Fleetwood 72

NEW REAR SUSPENSION . LaSalles, Cadillac 62

Softer Spring Action

Cross Link Rear Stabilizer

Improved Shock Absorbers

IMPROVED FRONT SUSPENSION . LaSalles, Cadillac 62

Threaded Bushings on Lower Control Arms

Rubber Oil Seals

Heavier Knuckle Support

STEADIER STEERING All Series

IMPROVED ROADABILITY All Series

For major points of chassis comparison see page 15.

BRAKES. See Hydraulic Brakes and Hand Brake, pages 160 to 162.

CHASSIS. Seven new or improved chassis, each different in themselves but all incorporating basic design principles developed and thoroughly tested by Cadillac engineers. They are:

LaSalle Fifty—New longer 123 in. wheelbase.

LaSalle "Special"—123 in. wheelbase especially suited to its wide body.

Cadillac Sixty-Two—New, longer 129 in. wheelbase.

Cadillac Fleetwood Sixty Special—127 in. wheelbase.

Cadillac Fleetwood, Series 72—Entirely new 138 in. wheelbase.

Cadillac Fleetwood, Series 75—Improved 141 in. wheelbase.

Cadillac Sixteen, Series 90—141 in. wheelbase.

CONTROLLED-ACTION RIDE. Greatest advancement in riding comfort since Knee Action. Reaches a new higher state of development and refinement for 1940. Following comfort standards long ago established by the luxurious Fleetwoods and design patterns formulated in the Sixty Special two years ago, greatest improvement has naturally been made in the lower priced models—LaSalle and Cadillac 62. As a result, a softer low speed ride, greater quietness and improved smoothness are obtained. High speed riding qualities and roadability have also been substantially improved.

Controlled-Action Ride means the combination of both a soft smooth ride over all types of road surfaces and car controllability and roadability at all speeds. This unity results from a properly designed and coordinated front and rear suspension as determined by the size and weight of the particular car. For these reasons the design features of Controlled-Action Ride are substantially the same on all Cadillac and LaSalle model lines.

The parts of the front and rear suspension which are properly coordinated in each Cadillac and LaSalle to produce Controlled-Action Ride are Knee Action, shock absorbers, rear springs, shackles and stabilizers. In all other cars where the relationship of all these units is not considered as a whole, a compromise must be made between a soft ride and roadability. When stress is laid on car stability, the ride is stiff and harsh. The recent trend in favor of a soft ride has resulted in such poor roadability that some cars are actually dangerous on curves at touring speeds. Controlled-Action Ride, which fulfills both the desirable features of comfort and safety in all Cadillacs and LaSalles, is another Cadillac engineering "First."

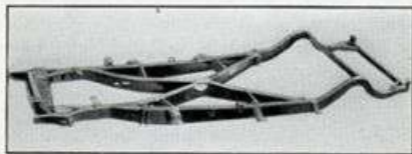
DRIVE SHAFT See Propeller Shaft, page 164.

FRAMES. Rigid, dual X-Type design on all Cadillacs and LaSalles. Heavily reinforced for strength and safety. Specific structural differences are required for each series in order to accommodate the sizes and weights of the new models.

LaSalle, Fifty and "Special." Double drop design for lowness. Sidebars $5\frac{1}{2}$ in. deep, 2 in. flange width. I-beam X-members $7\frac{1}{8}$ in. deep at center junction. Body mounted directly to frame side bars at all points on Fifty with a double bolt mounting on each side of the frame at the front of the body for maximum rigidity. LaSalle "Special" has ten heavy extension brackets for its new, extremely wide body. Body mountings are of fabric and rubber composition for quietness.

The new frames are an exceedingly strong, compact construction which improves road stability. Weight has been increased 60 lbs. Heavier steel is now used for side bars and X-members to insure

rigidity. Side bar depth has been decreased to permit lower overall height while maintaining road clearance. X-member arms are extended farther forward and join the side bars several inches in front of the dash to increase frame rigidity at the front. Flanges are heavier for greater strength and are extra thick for Series 50 convertible styles. Plates reinforce the center junction at both top and bottom.



New Fleetwood 72 Rigid X, I-beam Frame

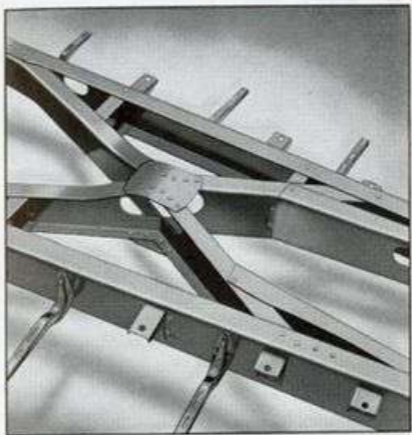
Heavy front cross member is reinforced by a steel plate at the bottom. Brackets bolted to this plate support lower control arms of Knee Action assembly. Cross member also supports the front end mounting which consists of securing the front fender braces and radiator casing to a new cradle just in front of and completely encircling the radiator core. This cradle protects the core in event of accident and increases front end stability.

Cadillac 62. Similar in design to the new LaSalle frame. Longer and heavier with additional flange thickness in the X-members because of car's six inches longer wheelbase and greater weight.

Sixty Special. Very low, double drop frame design to achieve ground hugging roadability. Rigid box reinforcement extends from rear X-member arms to cross member in front of gasoline tank.

Fleetwood Series 72. Deep $7\frac{3}{4}$ inch channel side bars. I-beam X-members extend ahead of dash for rigidity. Both side bars and X-members are deeper than for smaller models. Design features are similar to Cadillac 62 and LaSalle.

Fleetwood 75 and Sixteen. Heavy channel members for both side bars and X-members. Box section reinforcements strengthen the junction of



Rigid Fleetwood 75 and Sixteen Frame Bracing and Deep Center Junction

X-members and frame side bars. X-member center junction has exceptionally great depth of $9\frac{7}{16}$ inches. Heavy steel plates are used at center junction on frames for convertible body types to provide maximum rigidity.

HOTCHKISS DRIVE. See Propulsion, pages 164 to 165.

HYDRAULIC BRAKES. Duo-Servo or self-energizing in design. Expensive composite drums give a wear and score resisting, heat-radiating surface of cast iron moulded to a strong steel back plate. These drums, in addition to self-energization, permit use of hard durable linings and extend life and dependability of the brakes. Total brake lining areas are:

LaSalles, 196 sq. in.; Cadillac 62 and Sixty Special, 208 sq. in.; Fleetwood 72, 233 sq. in.; Fleetwood 75 and Sixteen, 258 sq. in.



*Large Cadillac
Hydraulic Brake*

On all models large brakes provide long brake lining life. Braking ratio is $54\frac{1}{2}\%$ front and $45\frac{1}{2}\%$ rear on LaSalles, Cadillac 62, Sixty Special and Fleetwood 72; 57% front and 43% rear on Fleetwood 75 and Sixteen. In stopping, weight tends to shift forward. Greater ratio at front increases braking effectiveness.

Self-energizing brakes are used because this method permits use of hard molded linings of longer wearing life and provides greater ease of brake operation than is possible in hydraulic brakes with small amount of self-energization. This principle involves conversion of car motion whether forward or in reverse, into additional braking energy. Brake shoes when applied tend to wrap themselves into tighter contact with the drums, thereby securing maximum braking energy with minimum pedal pressure. Both brake shoes are

interconnected so that each can adjust itself to the drum giving equal pressure around each brake shoe. Both shoes are, therefore, effective in stopping car in forward or reverse speed. Entire brake lining contacts drum wearing evenly and prolonging its life.



*With Duo-Self-Energizing Brakes
Both Shoes are Effective*

*With the Other Method Only
One Shoe is Effective*

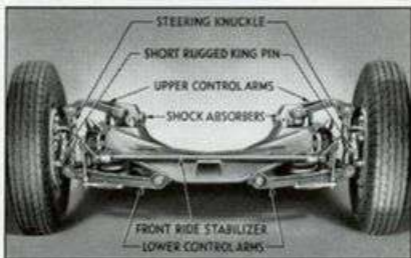
In another method of hydraulic braking which claims little self-energization, both shoes are anchored to the brake support plate, hence only one shoe is effective in stopping the car in either direction of travel. This reduces brake lining area by half and greatly increases lining wear. Much more foot pressure is required to stop the car. Also, the location of this anchor relative to the drum must be precisely maintained to secure uniform contact between shoes and drum. This is difficult, if not impossible, resulting in localized lining wear and either very hard or very sensitive brake application. Often impossible for driver to judge accurately amount of foot pressure necessary to bring his car to a smooth, easy stop.

Hand Brake. Independent mechanical system operating rear brake shoes for parking or emergency stops. Hand brake lever located to left of steering column close to driver. Has easily operated thumb release which locks lever quietly in any position.

Triangular equalizer provided to insure maximum dependability and safety. Individual cables run from equalizer, operated by brake lever to each rear brake shoe. Should one cable become inoperative, equalizer would still operate other shoe, insuring brake action.

In some cars hand brake operates upon propeller shaft. If one wheel is jacked up to change a tire, brake will not hold the car. This would be dangerous for one unfamiliar with this system. Also braking load is applied to drive line and rear axle gears. Quick application when car is moving might have disastrous consequences.

KNEE ACTION. Cadillac-LaSalle Controlled-Action Ride has been a subsequent development in the research which produced Knee Action in 1934. Cadillac was first to develop this indispensable feature for modern riding comfort.

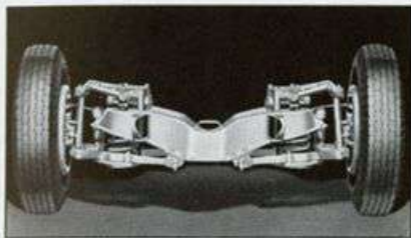


Knee Action—LaSalle Illustrated

Unlike other cars with independent front suspension Cadillac-engineered Knee Action adheres to fundamental principles governing correct springing of car weight. This ideal is a close approximation of spring rates or of spring's flexing ability. The front suspension should be slightly softer than the rear suspension.

Then, as car moves over road irregularities, spring action from front to rear is uniform. Shock is absorbed by the springs. This is one important reason for the unequalled Cadillac-LaSalle ride.

In Cadillac Knee Action each front wheel is fastened directly to the frame by two heavy steel arms which hold wheels in perfect alignment. Movement of either wheel has no effect on steering system. This eliminates car wander and shimmy. A tire blowout at high speed has much less effect on steering. Caster angle does not change with brake or spring action.



Fleetwood 75 and Sixteen Knee Action

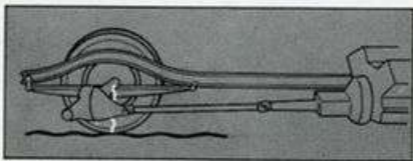
The upper forked arms are attached to and operate the shock absorbers which dampen excessive spring action. The lower control arms are fastened with shaft supports to the frame. Between the lower arms and the frame are helical coil springs of heavy steel. Their purpose is to allow the wheels to roll over road holes and bumps freely so that these shocks will not be transferred to the chassis.

New 1940 design features for LaSalle and Cadillac 62 Knee Action include the use of threaded inner bushings on the lower control arms to provide softer action. Rubber seals protecting these bushings promote longer lubrication life. Also, the short, rigid, knuckle supports are heavier, increasing safety.

PROPELLER SHAFT. Tubular spline construction combining great strength with light weight. Splines formed on inside of a tube pressed into a second tube equal in diameter to propeller shaft itself. Spline and shaft tubes are welded together. Each propeller shaft balanced dynamically and statically to $\frac{1}{2}$ ounce-inch limit at 4200 r.p.m. to prevent whip at high speeds.

Large, durable universal joints have eight permanently lubricated needle bearings. All mechanical parts of propeller shaft and universals effectively sealed against dirt and water. Long, heavy transmission extension permits short propeller shaft for high speed smoothness.

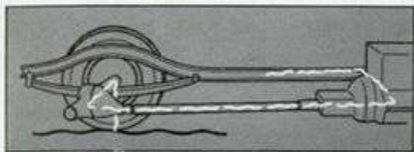
PROPULSION: HOTCHKISS DRIVE. Sixteen of the twenty-two American makes of motor cars employ Hotchkiss Drive which testifies to its universal application and engineering preference. For all Cadillacs and LaSalles it is the most expensive method of power propulsion. This additional cost brings many distinct advantages which at the present time cannot be obtained in torque tube or torque arm drive whether with leaf or coil type springs.



In Cadillac Hotchkiss Drive, pushing effort is through the springs into frame. Springs cushion shock and rubber shackles absorb vibration

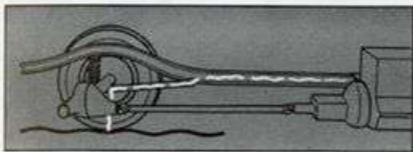
The illustration above shows the principle of Hotchkiss Drive. In all Cadillacs and LaSalles wheels follow road irregularities freely. Driving and braking forces are conducted between the rear axle and frame by leaf

springs. The engine is not involved as in torque tube drive. Hence, rubber engine supports do not have to absorb these forces and are entirely suited to their primary purpose of insulating engine. This insures greater engine smoothness.



In Torque Tube Drive, road shock is transmitted into the frame through torque tube, transmission and engine. Engine supports are stiff structural members

Since, in Hotchkiss Drive, the axle is attached to the frame by the rear springs, the springs themselves are completely insulated from chassis by rubber bushings at all points. Body and passengers ride more smoothly and quietly than is possible with torque tube or arm designs.

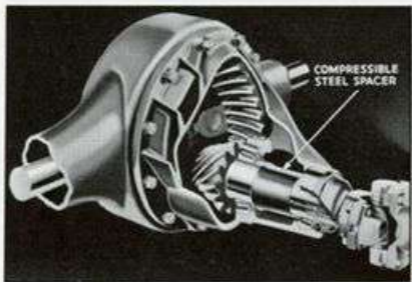


In Torque Arm Drive, road shock is transmitted through rigid radius rods to frame.

Coil type rear springs can be used only with torque tube or torque arm rear suspension. They are much less expensive than leaf springs. The new Cadillac-LaSalle Controlled-Action Ride for 1940 could be obtained only with Hotchkiss Drive and leaf springs.

REAR AXLE. Hypoid design on all series permits low body floors, ample headroom, high doors, extensive vision and low overall height for streamlined styling.

Cadillac design and precision manufacture insure long life and quiet operation. Ring gears and pinions held to extreme precision limits. Each gear set is carefully matched by hand in sound proof room. Each gear case is specifically manufactured for its own set of gears, a quality standard not adhered to by any other manufacturer.



Cadillac-LaSalle Precision Built Hypoid Rear Axle

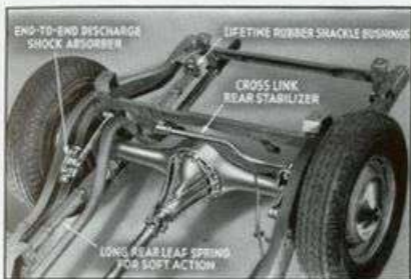
Both differential and pinion bearings are of tapered roller design for durability and quietness. Compressible steel spacer automatically maintains end loading of bearing inner races, preventing them from turning. This feature eliminates need for service adjustment.

Differential bearings are adjusted by shims on LaSalle's, Cadillac 62 and Sixty Special, while on Fleetwood 72, 75 and Sixteen the sleeves which position these bearings are threaded so that adjustment is effected by rotating the sleeve. Fleetwood 72, 75 and Sixteen ring gear diameter is 11 inches; on the four smaller series it is $9\frac{3}{8}$ inches.

Additional and exclusive features in Cadillac-LaSalle axle strength are (1) cylindrical shape of differential housing instead of the commonly used spherical type. (2) Housing encircles differential bearings and is heavily ribbed. (3) Axle cover is welded in position to increase housing rigidity.

Rear axle ratios for LaSalle, Cadillac 62 and Sixty Special are 3.92 to 1; for Fleetwood 75, 4.58 to 1; for Fleetwood 72 and Sixteen 4.31 to 1.

REAR SPRINGS AND SHACKLES. Semi-elliptic rear springs on all series have wax impregnated liners between the leaves. This feature is important to Controlled-Action Ride because friction of the spring is controlled exactly by amount and kind of liner mate-



New LaSalle Rear Suspension

rial. Friction is most desirable to control rear axle movement over rough roads, a feature not obtainable with frictionless coil springs. Free acting coil springs are ideally suited to the front suspension where there are no heavy parts, such as an axle, to control. Waxed liners are the only means yet devised which enable engineers to control rear spring action accurately.

In addition, liners eliminate spring squeaks and springs never require lubrication. Rear springs with waxed liners are exclusive to all Cadillacs and LaSalle's.



Rear Spring with Waxed Liners

New springs for LaSalle's and Cadillac 62 are $54\frac{1}{2}$ inches long, $2\frac{1}{2}$ inches longer than before, for much softer action and sturdier construction. They are longer rearward of the axle than they are ahead of it to increase softness and maintain control over axle movements. Sixty Special rear springs are $54\frac{1}{2}$ inches long; Fleetwood 72, $56\frac{1}{2}$ inches; Fleetwood 75 and Sixteen 62 inches.

Compression shackles are used on all series. These employ rubber bushings on LaSalle's, Cadillac 62 and Fleetwood 72 to provide soft action and quietness. Rubber bushings are also used in the front spring eyes. They never require lubrication. In fact, entire rear suspension of these series never requires lubrication through extensive use of rubber and waxed spring liners.

Sixty Special shackle bushings are threaded while Fleetwood 75 and Sixteen shackles are rubber above and threaded below. Front spring bushings on all three series are of life time rubber.

SHOCK ABSORBERS. Hydraulic, double acting, end-to-end discharge type on all series. Front shock absorbers attached to upper arms of Knee Action system and rear shock absorber arms to the rear spring pads.

End-to-end shock absorbers have more power to control both compression and rebound actions of the springs than all other types. Also, their shock absorbing characteristics may be more accurately determined by Cadillac engineers to achieve best riding results.

All shock absorbers are improved in design for 1940 to give softer action and a particularly smooth boulevard ride.

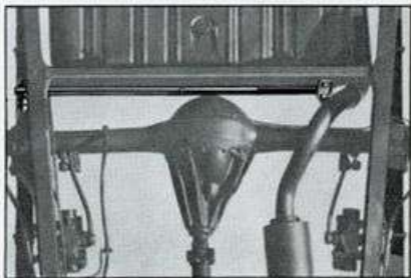
*Fleetwood 75 and Sixteen
Rear Shock Absorber*



Fleetwood 75 and Sixteen rear shock absorbers also have a three-way manual adjustment which permits a variation of setting to give a soft, medium or firm ride best suited to the owner's requirements.

STABILIZERS. Both front and rear on all series. Front stabilizer is a short, heavy one-piece spring bar or torsion rod mounted in front of frame cross member on LaSalles, Cadillac 62, Sixty Special and Fleetwood 72 chassis. It is behind the cross member on Fleetwood 75 and Sixteen chassis. Operating levers are linked to spring cups on the Knee Action lower control arms while shaft itself is bracketed to frame side members. New Sixty Special stabilizer is heavier improving stability of entire car.

Due to greater diameter and shorter length, Cadillac-LaSalle front stabilizers are more effective in holding car on an even keel than those used on other cars. Also important factor in high speed roadability.



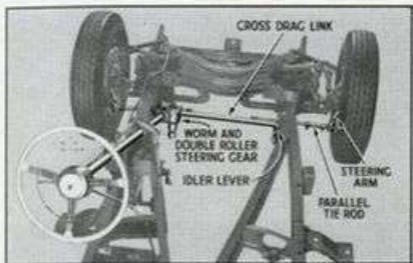
Cross Link Rear Stabilizer on Fleetwood 75 and Sixteen Chassis

Cross link rear stabilizer on all series—new on LaSalles and Cadillac 62—is most efficient in preventing axle hopping and body shake on rough roads. Heavy steel bar is linked between rear frame cross member and rear spring clip.

STEERING SYSTEMS. In addition to steering accuracy featured by the steering systems themselves, easier handling is achieved in LaSalles and Cadillac 62 by their improved Knee Action design and in the Sixty Special by its heavier front stabilizer.

With Knee Action, steering geometry approaches absolute accuracy because component parts of the steering system operate in correct geometric relationship to one another. Steering accuracy is obtained. Car wander and steering wheel whip are virtually eliminated. These conditions are impossible to achieve with a rigid front axle which some cars still continue to use.

Such a geometric relationship is obtained in LaSalles, Cadillac 62 and Sixty Special, and new Fleetwood 72 by Parallel Cross Steering. Heavy steel steering arms



Parallel Cross Steering System

attached to front wheels are operated by two tie rods. Inner ends of these rods are attached to a cross drag link operated in turn by steering gear. Tie rods are nearly same length as Knee Action lower control arms and parallel to them. Motion of wheels and arcs of tie-rods are coordinated and accurate steering geometry is assured.

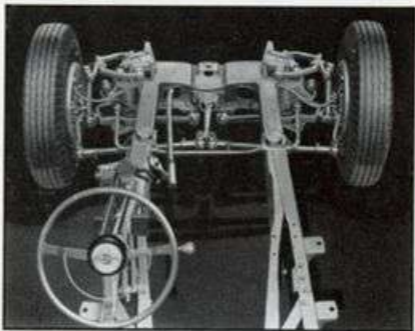


New Fleetwood 72 Steering Gear

All series except Fleetwood 72 use the sturdy worm and double roller steering gear. The Series 72 has a new unique recirculating ball type worm and nut steering gear providing extreme handling ease for this large new

model. A large number of ball bearings are interposed between the worm and the nut which encircles it providing a practically frictionless rolling contact. The balls work their way up and down the steering shaft and are recirculated at top and bottom by either of two return chambers.

To accommodate additional size and weight of Fleetwood 75 and Sixteen a Center Point steering system is used. A longitudinal drag link operates the tie rods at the center by means of a lever. Anti-friction bearings at top and bottom of king pins provide steering ease equal to smaller series. Steering column universal



Fleetwood 75 and Sixteen Steering System

joints are also used to insulate the body and steering wheel from road shock. These universals are of same size as those on propeller shafts of other cars and will withstand pressure of 1000 foot pounds.

WHEELS AND TIRES. Steel wheels are used on all series. Tires for LaSalles, Cadillac 62 and Sixty Special are 4 ply 7.00 x 16; for Fleetwood 72 and 75 and Six-

teen 7.50 x 16. Series 72, 75 and Sixteen tires are six ply. Selection of tire size and ply is based upon size and weight of each series to insure soft riding comfort with longest tire life.

On LaSalle and Cadillac 62 the spare tire and wheel is on the right side of trunk or deck floor. A platform over the tire fastens to the wheel and is easily removed in same way that a hub cap snaps into position. Of these series, LaSalle Fifty and Cadillac 62 only are available with six wheel and fenderwell equipment at extra cost.

Fleetwood 72 carries its spare tire and wheel on the right inner trunk wall mounted upright. A sixth wheel and tire at additional charge is mounted on the left inner wall. Ample luggage room remains in the center.

Spare tire and wheel is carried under a shelf which extends full width of the trunk or deck on Fleetwood 75 and Sixteen models. Six wheel and fenderwell equipment are available at additional charge.

THE 1940 CADILLAC AND LaSALLE COMMERCIAL CHASSIS

Three new and greatly improved commercial chassis are offered by Cadillac for 1940. Each has all of the mechanical improvements made in the pleasure cars and in addition many features of extra rugged construction, making them the only chassis especially designed and built for funeral car or ambulance useage by a fine car manufacturer. These chassis are also admirably adapted to 12-passenger coach and sight-seeing equipment.

All chassis have unusually heavy one-piece frames, special springs front and rear and six ply tires. The LaSalle chassis of 159 $\frac{1}{4}$ inch wheelbase also has large brakes, heavier steering knuckles and special rear axle.

The new Cadillac 72 commercial chassis of 165 $\frac{1}{2}$ inch wheelbase affords an exceptionally roomy body and has the powerful high compression 140 horsepower V-8 engine.

The Series 75 chassis is of very sturdy construction and ruggedness to suit it for extra heavy duty. Its appearance and performance have both been improved.

As the outstanding leader in the hearse, ambulance and coach chassis fields, Cadillac has created extensive good will among these owners. Thus, while the retail salesman does not participate directly in this business, many excellent Cadillac-LaSalle pleasure car prospects are available to him through his cooperation with body builders who sell Cadillac-LaSalle chassis.

2002 SERVICE AND SPECIFICATIONS

INDEX

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Service
Detail Specifications

1940 CADILLAC-LASALLE ACCESSORIES

Installed complete, not including any local taxes.

AUTOMATIC BATTERY FILLER, All Series	\$ 7.50
AUTOMATIC CIGARETTE LIGHTER,	
LaSalle Fifty and "Special"	2.25
COOL CUSHION, All Series	2.95
FLEXIBLE STEERING WHEEL	15.00
GLARE SHIELD, All Series	1.50
GRILLE GUARD	
LaSalle Fifty and "Special"	10.00
Cadillac 62, Fleetwood Sixty Special, 72 and 75	10.00
HEATERS	
Defrosting Heater—All Series	26.50*
Ventilating Defrosting Heater—All Series	31.50*
Dual Ventilating Defrosting Heater	
LaSalle Fifty, "Special," Cadillac 62 and Sixty Special	48.50
Fleetwood 72, 75 and Sixteen	52.50
* \$5.00 extra on Sixteen	
HINGE MIRROR, All Series	4.50
LICENSE FRAMES, All Series (Pair)	3.00
LIGHTS	
Fog Lights—All Series (Pair)	14.50
Spotlight—All Series	18.50
LUGGAGE	
Sport Bag	15.00
Aerolite Case	18.50

MISCELLANEOUS

Blue Coral.....	2.50
Blue Coral Sealer.....	1.00
Dust Mit.....	.65
Body Polish (Pint).....	.60
Bulb Kit.....	.70
Chrome Cleaner (Pint).....	.60
Fabric Cleaner (Pint).....	.60
Flashlight.....	1.50
Glass Cleaner.....	.45
Handy Brush.....	2.00
Moto-Pack.....	6.85
Radiator Cleaner and Inhibitor.....	2.00
Radiator Inhibitor.....	.75
Tire Gauge.....	1.00
White Side Wall Tire Cleaner (Pint).....	.60

NoROL

LaSalle Fifty, "Special," Cadillac 62, Fleetwood 72.....	11.00
Fleetwood Sixty Special.....	12.50
Fleetwood 75 and Sixteen.....	13.50

RADIO

Automatic—for All Series. Installed Complete with Aerial.....	69.50
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ROBES

Fleetwood cloth and crushed plush or Alpaca.....	50.00
Monograms.....	5.50
Double Alpaca in brown or gray.....	30.00
Alpaca and Plush in brown or gray.....	30.00

SEAT COVERS, All Series (Per Seat).....	8.25
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WHEEL DISC (Chrome), All Series (each).....	4.00
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WHEEL TRIM RINGS, All Series (each).....	1.50
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WINDSHIELD WASHER

All Series.....	6.50
Winter Solution.....	.25

SERVICE AS A SALES AID

The high standards of Authorized Cadillac-LaSalle Service provide an effective sales story for car salesmen. Authorized Service also contributes definite sales assistance by fostering good will and by maintaining customer interest in Cadillac between new car purchases.

The sales story on Cadillac-LaSalle service includes the following important points that should be thoroughly understood by every Cadillac salesman:

A WRITTEN SERVICE POLICY. The responsibilities of both the owner and the service station are clearly outlined on a Certificate which is presented to the owner when he takes delivery of a new Cadillac or LaSalle.

FREE INSPECTIONS. The owner is entitled to have his car tested and inspected without charge at any time by any Authorized Service Station, provided no dismantling of parts is required.

TOURIST PRIVILEGES. The owner is furnished with an Identification Card which entitles him to warranty service from any Authorized Cadillac distributor or dealer anywhere in the United States or Canada.

UNIFORM PRICES ON PARTS. The List Prices published in the Parts Book hold good anywhere in the United States.

FAIR MAINTENANCE CHARGES. The Standard Service Price Schedule giving flat rate charges for repairs is open to inspection by owners at any Authorized Service Station.

THE SERVICE POLICY CERTIFICATE which is given to the owner may be summed up in brief, as a sincere attempt by the Cadillac Motor Car Division to give its owners the high standards of craftsmanship in service that are upheld in the manufacture of our cars.

This is made possible by Cadillac's trained service men whose years of experience with Cadillac cars average approximately eleven years per man. These men are kept up-to-date by continuous Factory training, through monthly publications, special letters and bulletins.

The most valuable contribution of Authorized Cadillac-LaSalle service to the salesman is, however, in maintaining the owner's good will and interest in Cadillac. Authorized Service keeps the cars in satisfactory operating condition with a minimum of expense and inconvenience. In addition, the Lubrication Agreement, Service Contract, and the Owner Follow-Up System provide a means of maintaining regular contact with each owner.

LUBRICATION AGREEMENT

The value of the Lubrication Agreement to Cadillac distributors and dealers is no longer questioned. This single service has brought over a million calls to distributors' and dealers' service stations since it was introduced by Cadillac in 1931.

The Cadillac-LaSalle Lubrication Agreement is based on the idea of *mutual advantage to both the car owner and the service station*—intended to assure owner satisfaction through regular, expert service at a substantial saving to the owner.

By purchasing his lubrication work in advance, the owner receives Cadillac lubrication and inspection service at 1000-mile intervals for a period of 12,000 miles at a price reduction of about 25 per cent.

The Lubrication Agreement includes all lubrication operations on a schedule recommended by Cadillac engineers and all lubricants including engine oil, except those small quantities added between 1,000 mile lubrications. It also includes two changes of rear axle and

transmission lubricant and six changes of engine oil in addition to lubrication of all chassis points.

Although the sale of Lubrication Agreements is primarily a service department activity, the benefits that a salesman may secure from having his customers as Lubrication Agreement holders will justify considerable effort on his part to sell one of these agreements to each new car purchaser.

The *prices* of the Lubrication Agreement are as follows:

	Price
LaSalle Fifty and "Special"	\$28.50
Cadillac 62	28.50
Fleetwood Sixty Special, 72, 75	31.00
Cadillac Sixteen	45.00

Repeat sale business can be secured more easily if owners return regularly to the dealer's service station. Periodic contacts secured through the sale of Lubrication Agreements assure satisfactory operation of the car, correction of any misunderstanding that might occur, and advance information on the owner's plans for future purchases.

SERVICE CONTRACT

The Cadillac-LaSalle Service Contract offers new owners economical mechanical maintenance on Cadillac-LaSalle cars. The Service Contract covers all necessary maintenance work—on both chassis and body, including material and labor—for the first 12,000 miles or first year for as low as \$6.25 per month including lubrication.

The service is rendered at the regular 1,000-mile intervals when the car is brought in for lubrication and includes everything except tires, anti-freeze, accessory repairs, accident work and appearance service.

Thus the salesman can tell the owner exactly how much it will cost him to operate his new Cadillac or

LaSalle for the first year or 12,000 miles for both lubrication and mechanical repairs.

The purchaser of a Service Contract must first purchase a Lubrication Agreement. When an owner's car is covered by both he is assured of trouble-free operation of his car for as little as $\frac{5}{8}$ of a cent per mile.

One of the most powerful talking points that a salesman can have is economy of upkeep. With these two plans, Cadillac salesmen have plenty of ammunition to dispel any fears as to high cost of maintenance that may exist in the minds of their prospects.

Remember to explain that the purchasers of either of these service plans may use them anywhere in the United States where the Cadillac Authorized Service Sign is displayed. The owner purchases in advance the privilege of having his service work done by trained Cadillac service men anywhere in the country.

The prices of the Service Contract and Lubrication Agreement are totaled below:

	Lubrication Agreement*	First Year Service Contract	Total	Average Cost Per Month
LaSalle 50, "Spec."	\$30.25	\$44.75	\$75.00	\$ 6.25
Cadillac 62	30.25	49.75	80.00	6.67
Fleetwood 60s	32.75	52.25	85.00	7.08
Fleetwood 72, 75	32.75	62.25	95.00	7.92
Cadillac Sixteen	48.00	82.00	130.00	10.83

**Price of Lubrication Agreement includes new car oil change at 1000 miles when sold with Service Contract.*

The salesman who sells the Service Contract to his customers is assured of three things that mean much to his future welfare:

1. Most efficient and economical operation of the owner's Cadillac or LaSalle.
2. Maintained contact with the owner.
3. Thorough good will of the owner for himself, his distributor, dealer, and Cadillac-LaSalle.

DETAILED SPECIFICATIONS

ENGINE	LaSalle "50" & Spec.	Cadillac "62" & Sixty Special	Cadillac Fleet- wood "72" & "75"	Cadillac Sixteen
No. of cylinders.....	8	8	8	16
Valve arrangement.....	L-head	L-head	L-head	L-head
Bore and stroke.....	3 5/8" x 4 1/2"	3 5/8" x 4 1/2"	3 5/8" x 4 1/2"	3 3/4" x 3 3/4"
Engine mounted on:				
Front.....	Vulcanized rubber	Vulcanized rubber	Vulcanized rubber	Vulcanized rubber
Rear.....	Vulcanized rubber	Vulcanized rubber	Bolt through rubber	Bolt through rubber
Rubber mounting used at.....	All points	All points	All points	All points
Number of points of suspension.....	3	3	3	5
Engine make.....	Own	Own	Own	Own
Engine model.....	40-50, 40-52	40-62, 40-60S	40-72, 40-75	40-90
Cylinder Arrangement.....	90° V-8	90° V-8	90° V-8	135° V-16
Cylinder head material.....	Cast iron	Cast iron	Cast iron	Cast iron
Piston displacement.....	322	246	346	431
Taxable horsepower.....	36.45	29.20	39.20	67.60
Maximum brake horsepower at R.P.M.....	120 at 3400	135 at 3400	140 at 3400	185 at 3600
Standard compression ratio.....	6.25 to 1	6.25 to 1	6.7 to 1	6.75 to 1
Standard compression pressure (lbs.).....	155 $\frac{1}{2}$ at 1000 R.P.M.	155 $\frac{1}{2}$ at 1000 R.P.M.	170 $\frac{1}{2}$ at 1000 R.P.M.	180 $\frac{1}{2}$ at 1000 R.P.M.

PISTONS AND RINGS

Piston material.....	Lo-Ex aluminum alloy	Lo-Ex aluminum alloy	Lo-Ex aluminum alloy	Lo-Ex aluminum alloy
Piston features.....	T-slot, anodized finish	T-slot, anodized finish	T-slot, anodized finish	T-slot, anodized finish
Piston weight, oz. (without rings, pin or locking rings).....	16.88	18.30	18.30	15.280
Piston weight, oz. (with rings, pin and locking rings).....	25.12	25.10	25.10	21.136
Piston length.....	4 1/4"	4 1/4"	4 1/4"	3 3/4"
Piston clearance.....	.0019"	.0021"	.0021"	.0017"
No. of oil rings used per piston.....	2	2	2	1
No. of compression rings used per piston.....	2	2	2	2

RODS AND PINS

Wrist pin length.....	2 1/8"	3 1/8"	3 1/8"	2 3/8"
Wrist pin diameter.....	3/8"	3/8"	3/8"	11/16"

DETAILED SPECIFICATIONS—Cont'd

RODS AND PINS—Cont'd

Is wrist pin locked in platon or floating?

Wrist pin clearance.....	LaSalle "50" & Spec. Floating .0004 press fit one end .0000 clearance other end	Cadillac Fleet- wood "72" & "75" Floating .0004 press fit one end .0000 clearance other end	Cadillac Sixteen Locked in rod .00035" clearance
Wrist pin hole finish.....	Diamond bore	Diamond bore	Diamond bore
Connecting rod length, center to center.....	8 3/4"	8 3/4"	8 3/4"
Connecting rod material.....	#1035 steel	#1035 steel	#1340 steel
Connecting rod weight, ounces.....	37.472	37.472	53.528
Crankpin journal diameter and length.....	2.460" x 2 1/8"	2.460" x 2 1/8"	2" x 1 3/4"
Connecting rod bearing material.....	#1010 steel backed babblitt	#1010 steel backed babblitt	#1010 steel backed babblitt
Connecting rod bearing clearance.....	.0015"	.0015"	.0015"
Connecting rod bearing end play.....	.003-.006"	.003-.006"	.0045-.0075"
Connecting rod bearing poured, spun or separate	Separate	Separate	Separate
Rods and pistons removed from.....	Above	Above	Above

CRANKSHAFT

Vibration damper used.....	No	Yes	Yes
Crankshaft counterweights used, No. of.....	6	6	8
Torsional vibration damper type.....	None	Laminated springs	Rubber
Bending vibration damper type.....	None	Flywheel	None
Which main bearing takes thrust?.....	Center (#2)	Center (#2)	Center (#5)
Crankshaft end play.....	.001-.005"	.001-.005"	.001-.003"
Main bearing material.....	Steel backed babblitt	Steel backed babblitt	Center: Bronze backed babblitt. Others: Steel backed babblitt
Main bearing clearance.....	.0015"	.0015"	.0015"
Main bearing type.....	Slip-in	Slip-in	Slip-in
No. 1 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 2 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 3 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 4 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 5 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 6 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 7 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 8 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"
No. 9 main bearing journal, diameter & length.....	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"	2 1/2" x 1 1/8"

DETAILED SPECIFICATIONS—Cont'd

TIMING CHAIN

	LaSalle "50" & Spec.	Cadillac "62" & Sixty Special	Cadillac Fleet- wood "72" & "75"	Cadillac
Timing chain make.....	Morse	Morse	Morse	Morse
Timing chain model.....	Type C #3682-R	Type C #3682-R	Type C #3682-R	Type C #3682-R
Timing chain length, inches.....	23 1/4"	23 1/4"	23 1/4"	23 1/4"
Timing chain, number of links.....	62	62	62	36
Timing chain, width.....	1 1/4" side guide	1 1/4" side guide	1 1/4" side guide	1 1/4" side guide
Timing chain, pitch.....	3/4"	3/4"	3/4"	3/4"
Timing chain adjustment.....	None	None	None	None

VALVES

Intake valve head actual overall diameter.....	1.876-1.886"	1.876-1.886"	1.876-1.886"	1.495-1.503"
Intake valve angle of seat.....	45°	45°	45°	45°
Insert used?.....	No	No	No	No
Valve seat cooled by.....	Directed water circulation	Directed water circulation	Directed water circulation	Distributing tube
Intake valve stem to guide clearance.....	.0023"	.0023"	.0023"	.002"
Intake valve lift.....	.333"	.333"	.333"	.290"
Intake valve spring pressure and length with valve closed.....	66 lbs.-1.926"	66 lbs.-1.926"	66 lbs.-1.926"	50 lbs.-1.772"
with valve open.....	145 lbs.-1.581"	145 lbs.-1.581"	145 lbs.-1.581"	98 lbs.-1.482"
Is tappet clearance automatically adjusted?.....	Yes	Yes	Yes	Yes
Exhaust valve head actual overall diameter.....	1.628-1.636"	1.626-1.636"	1.626-1.636"	1.370-1.380"
Exhaust valve angle of seat.....	45 degrees	45 degrees	45 degrees	45 degrees
Insert used?.....	No	No	No	No
Valve seat cooled by.....	Directed water circulation	Directed water circulation	Directed water circulation	Distributing tube
Exhaust valve stem to guide clearance.....	.0033"	.0033"	.0033"	.003"
Exhaust valve lift.....	.345"	.345"	.345"	.302"
Exhaust valve spring pressure and length with valve closed.....	66 lb.-1.926"	66 lb.-1.926"	66 lb.-1.926"	50 lb.-1.772"
with valve open.....	145 lb.-1.581"	145 lb.-1.581"	145 lb.-1.581"	100 lb.-1.470"
Is tappet clearance automatically adjusted?.....	Yes	Yes	Yes	Yes

DETAILED SPECIFICATIONS—Cont'd

VALVES—Cont'd	LaSalle "50" & Spec.	Cadillac "62" & Sixty Special	Cadillac Fleet- wood "72" & "75"	Cadillac Sixteen
Valve timing—Intake opens	T.D.C.	T.D.C.	T.D.C.	6° B.T.C.
Valve timing—Intake closes	42° A.B.C.	42° A.B.C.	42° A.B.C.	28° A.B.C.
Valve timing—Exhaust opens	52° B.B.C.	52° B.B.C.	52° B.B.C.	44° B.B.C.
Valve timing—Exhaust closes	10° A.T.C.	10° A.T.C.	10° A.T.C.	12° A.T.C.
LUBRICATION				
Valve lubrication method	Pressure	Pressure	Pressure	Pressure
Lubricating system type	Pressure	Pressure	Pressure	Pressure
Oil pressure to main bearings	Yes	Yes	Yes	Yes
Oil pressure to connecting rod bearings	Yes	Yes	Yes	Yes
Oil pressure to wrist pins	Yes	Yes	Yes	No
Oil pressure to camshaft bearings	Yes	Yes	Yes	Yes
Timing gear lubrication	Positive	Positive	Positive	Positive
Oil pump type	Helical gear	Helical gear	Helical gear	Helical gear
Oil grade recommended—S.A.E. viscosity	Lowest Temp. +32°F—20W or S.A.E. 20	Lowest Temp. +32°F—20W or S.A.E. 20	Lowest Temp. +32°F—20W or S.A.E. 20	Lowest Temp. +32°F—20W or S.A.E. 20
	+10°F—20W	+10°F—20W	+10°F—20W	+10°F—20W
	-10°F—10W	-10°F—10W	-10°F—10W	-10°F—10W
	Below and 10% Kerosene 25# at 30 M.P.H.	Below and 10% Kerosene 25# at 30 M.P.H.	Below and 10% Kerosene 25# at 30 M.P.H.	Below and 10% Kerosene 25# at 30 M.P.H.
Normal oil pressure lbs. at M.P.H.	30 lbs.	30 lbs.	30 lbs.	30 lbs.
Pressure at which relief valve opens	7	7	7	11
Capacity of oil reservoir, quarts	2000	2000	2000	2000
Drain oil, miles	Threaded plug	Threaded plug	Threaded plug	Threaded plug
Type of oil drain	Dip stick	Dip stick	Dip stick	Float
Oil reservoir gauge type	None	None	None	A.C.
External oil filter, make	High pressure	High pressure	High pressure	High pressure
Chassis lubrication type	Yes	Yes	Yes	Yes
Crankcase ventilating system				
FUEL				
Gasoline tank capacity	22 gallons	22 gallons	"72"—24 gallons "75"—26.5 gallons	26.5 gallons
Fuel feed type	Camshaft pump	Camshaft pump	Camshaft pump	2 mechanical pumps

DETAILED SPECIFICATIONS—Cont'd

FUEL—Cont'd	LaSalle
Carburetor make	"50" & Spec.
Carburetor size	Carter
Carburetor type	1 1/2"
Up or down draft	Plain tube
Single or dual	Down draft
Heat adjustment	Dual
Automatic choke type	None
Automatic choke make	Thermostatic
Air cleaner make	Carter
Intake silencer make	A.C.
	A.C.

Cadillac Fleet-wood "72" & "78"
Sixty Special Stromberg
1 1/2"
Plain tube
Down draft
Dual
None
Thermostatic Stromberg
A.C.
A.C.

Cadillac
Sixteen
Carter
2-1 1/2"
Plain tube
Down draft
Dual
None
Thermostatic Carter
A.C.
A.C.

COOLING

Cooling circulation, type of	Pump
Water pump type	Centrifugal
Water pump drive	Vee belt
Radiator shutter make and control	Own-Thermostatic
Radiator core type	Tube and fin
Radiator core make	Harrison
Cooling capacity, quarts	2 1/2
Water jackets full length of cylinders	Yes
Fan belt type	1-Vee belt
Fan belt length (pitch circumf.)	33 1/2"
Fan belt width, maximum	1 1/4"
Fan drive ratio	.95 to 1

Pump
Centrifugal
Vee belt
Own-Thermostatic
Tube and fin
Harrison
2 1/2"
Yes
1-Vee belt
62; 33 1/2"; 60S; 30 1/4"
1 1/4"
.95 to 1

Two pumps
Centrifugal
Vee belt
Own-Thermostatic
Cellular
Harrison
30"
Yes
2-Vee belts
49 1/2"
5 1/2"
.95 to 1

IGNITION

Ignition unit make	Delco-Remy
Manual advance, degrees	20°
Maximum automatic advance, degrees	22°
Vacuum advance, degrees	18°
Distributor breaker gap	.0125-.0175"
Timing, breaker points open at	5° B.T.C.
Firing order	Front 2-4-6-8 1-3-5-7 1-8-7-3-6-5-4-2

Delco-Remy
20°
22°
18°
.0125-.0175"
5° B.T.C.
Front 2-4-6-8 1-3-5-7 1-8-7-3-6-5-4-2

Delco-Remy
20°
18°
None
.0125-.0175"
6° B.T.C.
Front 2-4-6-8-10-12-14-16 1-3-5-7-9-11-13-15 1-4-9-12-3-16-11-8-15-16 7-6-13-2-5-10

DETAILED SPECIFICATIONS—Cont'd

IGNITION—Cont'd	LaSalle	Cadillac "6.2" & Sixty Special	Cadillac Fleetwood "72" & "75"	Cadillac
Ignition coil make.....	Delco-Remy #1115128	Delco-Remy #1115128	Delco-Remy #1115128	Delco-Remy #1553-E (two)
Amperage draw of coil with engine stopped.....	4.4	4.4	4.4	4.4
Amperage draw of coil with engine idling.....	2.2	2.2	2.2	2.2
Spark plug thread.....	10 mm.	10 mm.	10 mm.	10 mm.
Spark plug model.....	#104	#104	#104	#104
Spark plug make.....	A.C.	A.C.	A.C.	A.C.
Spark plug gap.....	.025-.030*	.025-.030*	.025-.030*	.030-.035*

BATTERY

Battery make.....	Delco
Battery Number.....	17 K.2W
Battery capacity—ampere hours.....	115
Battery bench charging rate—start.....	10
Battery bench charging rate—finish.....	8
Which battery terminal is grounded?.....	Positive

STARTING MOTOR

Starting motor make.....	Delco-Remy #1107912 (4-pole)	Delco-Remy #1107912 (4-pole)	Delco-Remy #1107912 (6-pole)	Delco-Remy #000783 (6-pole)
Starting motor drive.....	Solenoid shifted gear	Solenoid shifted gear	Solenoid shifted gear	Solenoid shifted gear
Automatic starting device.....	Delco-Remy	Delco-Remy	Delco-Remy	Delco-Remy
Starting motor pinion meshes flywheel.....	push button	push button	push button	push button
Flywheel teeth, integral or steel ring.....	Front	Front	Front	Front
Gear ratio between starter armature and flywheel.....	Steel ring	Steel ring	Steel ring	Steel ring
	17 to 1 (approx.)	17 to 1 (approx.)	17 to 1 (approx.)	17 to 1 (approx.)
GENERATOR	Peak load	Peak load	Peak load	Peak load
Generator make.....	Delco-Remy #1102661	Delco-Remy #1102661	Delco-Remy #1102661	Delco-Remy #1102666
Generator driven by.....	Belt	Belt	Belt	Belt
Is generator air cooled?.....	Yes	Yes	Yes	Yes
Voltage at cutoff closing.....	6.3-6.9	6.3-6.9	6.3-6.9	6.3-6.9
Amperes to open cutoff.....	0-2	0-2	0-2	0-2

DETAILED SPECIFICATIONS—Cont'd

GENERATOR—Cont'd

Generator normal charging rate.....	LaSalle "50" & Spec.	32 amps. min. peak hot. Due to voltage regulation actual charging rate is con- trolled by state of charge of battery	Cadillac "62" & Sixty Special	32 amps. min. peak. Due to voltage regu- lation actual charg- ing rate is controlled by state of charge of battery	Cadillac Fleet- wood "72" & "75"	32 amps. min. peak. Due to voltage regu- lation actual charg- ing rate is controlled by state of charge of battery
Car speed for minimum peak charging.....		27 M.P.H.		27 M.P.H.		27 M.P.H.
Generator belt.....		Vee		Vee		Vee
Generator belt width, maximum.....		$\frac{3}{8}$ "		$\frac{3}{8}$ "		$\frac{3}{8}$ "
Generator type.....		Peak load		Peak load		Peak load

LAMPS

Lighting switch make.....	Delco-Remy #192-5010	Double	Delco-Remy #192-5010	Double	Delco-Remy #192-5010	Double
Are double or triple filament bulbs used?.....		Depressed beam foot switch		Depressed beam foot switch		Depressed beam foot switch
How are headlamps dimmed?.....		Guide Sealed beam 6 H		Guide Sealed beam 6 H		Guide Sealed beam 6 H
Headlight make.....		Guide-mounted on fender		Guide-mounted on fender		Guide-mounted on fender
Headlight cover glass diameter.....		Guide		Guide		Guide
Parking light make.....		Airtone		Airtone		Airtone
Tail light make.....		Delco-Remy K-33-H 16-18		Delco-Remy K-33-H 16-18		Delco-Remy K-33-H 16-18
Horn type.....						
Horn make.....						
Ampereage draw of horns.....						

CLUTCH

Clutch make.....	Long	Long	Long
Operated dry or in oil.....	Dry	Dry	Dry

DETAILED SPECIFICATIONS—Cont'd

CLUTCH—Cont'd

Clutch vibration insulator or neutralizer.....	LaSalle "50" & Spec.
Number of clutch driven discs.....	Coil spring type
Clutch facing material.....	1
Clutch facing inside diameter.....	Woven
Clutch facing outside diameter.....	7"
Clutch facing thickness.....	10 1/2"
Number of clutch facings used.....	137"
Facing area.....	2
	96.16 sq. in.
	53.5 sq. in.

	Cadillac Fleet- wood "72" & "75"	Cadillac Sixteen
	Coil spring type	No
	1	1
	Woven	Woven
	7"	7"
	11"	11 1/2"
	137"	125"
	2	2
	113.4 sq. in.	130.8 sq. in.

	Cadillac "62" & Slaty Special
	Coil spring type
	1
	Woven
	7"
	10 1/2"
	137"
	2
	96.16 sq. in.

TRANSMISSION

Transmission make.....	Own
Number of forward speeds.....	3
Control—on steering column.....	Manual
Gear ratio in high.....	3.62
Transmission ratio in second.....	1.83 to 1
Transmission ratio in low.....	2.39 to 1
Transmission ratio in reverse.....	2.39 to 1
Type of gears—1st.....	Sliding-helical
Type of gears—2nd.....	Constant mesh helical
Type of gears—reverse.....	Sliding-helical
Synchronous meshing 2nd and 3rd gears.....	Yes
Transmission oil capacity, pints.....	2 1/2
Transmission oil grade recommended—S.A.E. viscosity.....	S.A.E. 90 E.P.
Universal make.....	Mechanics
Universal model.....	#3-C
Universal type.....	Needle bearing
Universal joints lubricated.....	Permanently
Drive and torque taken through.....	Rear springs

	Own
	3
	Manual
	3.62
	1.83 to 1
	2.39 to 1
	2.39 to 1
	Sliding-helical
	Constant mesh helical
	Sliding-helical
	Yes
	2 1/2
	S.A.E. 90 E.P.
	Mechanics
	#3-C
	Needle bearing
	Permanently
	Rear springs

	Own
	3
	Manual
	4.31
	1.83 to 1
	2.39 to 1
	2.39 to 1
	Sliding-helical
	Constant mesh helical
	Sliding-helical
	Yes
	2 1/2
	S.A.E. 90 E.P.
	Mechanics
	#3-C
	Needle bearing
	Permanently
	Rear springs

DETAILED SPECIFICATIONS—Cont'd

	LaSalle "50" & Spec.	Cadillac "62" & Sixty Special	Cadillac Fleet- wood "72" & "75"	Cadillac
REAR AXLE				
Rear axle make	Own	Own	Own	Own
Rear axle type	Semi-floating	Semi-floating	Semi-floating	Semi-floating
Minimum road clearance under center of rear axle, tires inflated	8 1/4"	8 1/4"	8"	8"
Differential gear make	Own	Own	Own	Own
Rear axle oil capacity, pints	5	6 1/2	6 1/2	6 1/2
Rear axle oil grade recommended, S.A.E. viscosity	90 Hypoid	90 Hypoid	90 Hypoid	90 Hypoid
Type of final gearing	Hypoid	Hypoid	Hypoid	Hypoid
Gear ratio, standard 5 pass. sedan	3.92	3.92	3.92	4.31
Optional gear ratio	None	None	None	None
No. of teeth in ring gear	47	47	47	56
No. of teeth in pinion	12	12	12	13
How is the pinion adjusted	No adjustment	No adjustment	No adjustment	No adjustment
How is pinion bearing adjusted?	None	None	None	None
Are pinion bearings in sleeve	No	No	No	No
Backlash between pinion and ring gear	.004-.010"	.004-.010"	.004-.010"	.004-.010"
Are pinion bearings preloaded	Yes	Yes	Yes	Yes
TIRES AND WHEELS				
Tire make	U. S. & Firestone	U. S. & Firestone	U. S. & Firestone	U. S. & Firestone
Tire size	7.00-16	7.00-16	7.50-16	7.50-16
Number of plies	4	4	6	6
Inflation pressure front and rear	24 1/2 minimum	26 1/2, Spec. 28 1/2	32 1/2	32 1/2
Rim diameter	16"	16"	16"	16"
Rim width	4.50"	4.50"	5.00"	5.00"
Axle clearance, for jack, tires inflated, front	Bumper jack	Bumper jack	72 B. jack, 7 1/2-9 1/2"	9 1/2"
Axle clearance, for jack, tires inflated, rear	Bumper jack	Bumper jack	72 B. jack, 7 1/2-12 1/4"	12 1/4"
Wheel type	Slotted disc	Slotted disc	Slotted disc	Disc
Wheel make	Kelsey-Hayes	Kelsey-Hayes	Kelsey-Hayes	Kelsey-Hayes
SPRINGS				
Front, suspension, independent or conventional	Independent	Independent	Independent	Independent
Front spring type	Helical	Helical	Helical	Helical

DETAILED SPECIFICATIONS—Cont'd

SPRINGS—Cont'd	LaSalle "50" & Spec.	Cadillac "62"	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
Front spring material	GM #9290 steel	GM #9290 steel	GM #9290 steel	GM #9290 steel
Rear spring type	Semi-elliptic	Semi-elliptic	Semi-elliptic	Semi-elliptic
Rear spring material	GM #9290 steel	GM #9290 steel	GM #9290 steel	GM #9290 steel
Rear spring length	54 1/2"	54 1/2"	56 1/2"	62"
Rear spring width	3"	3"	2 3/4"	2 3/4"
Rear spring number of leaves—5 pass. sedan	5	5	10	10
Spring leaves lubricated with	Wax impregnated liners	Wax impregnated liners	Wax impregnated liners	Wax impregnated liners
Spring shackles type, rear	Rubber	62-Rubber	Rubber	Rubber and threaded
Spring eye type	Rubber	Rubber	Rubber	Rubber
Stabilizers	Front and rear	Front and rear	Front and rear	Front and rear
STERING				
Steering gear type	Worm and double tooth roller	Worm and double tooth roller	Recirculating ball	Worm and double tooth roller
Steering gear make	Saginaw	Saginaw	Saginaw	Saginaw
Caster angle	Neg. 1 3/4" to Neg. 2 3/4"	Neg. 1 3/4" to Neg. 2 3/4"	Neg. 1 3/4" to Neg. 2 3/4"	Neg. 1/2" to Neg. 1"
Camber angle	0° to 1/4"	0° to 1/4"	0° to 1/4"	0° to 1/4"
Toe-in inches, car in motion	0 to 1/8"	0 to 1/8"	0 to 1/8"	0 to 1/8"
Toe-in inches, car at rest	1/8 to 1/4"	1/8 to 1/4"	1/8 to 1/4"	1/8 to 1/4"
Crosswise inclination of kingpins, degrees	3° 0'	3° 0'	3° 1'	3° 1'
Front suspension type	Forked arms	Forked arms	Forked arms	Forked arms
Front suspension make	Own	Own	Own	Own
Forked arm bearings, type	Threaded	Threaded	Threaded	Threaded
BRAKES				
Number of complete brakes	4	4	4	4
Foot brakes, make	Bendix	Bendix	Bendix	Bendix
Foot brakes, type of mechanism	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Vacuum booster make	None	None	None	None
Brake lining molded or woven	Molded	Molded	Molded	Molded

DETAILED SPECIFICATIONS—Cont'd

BRAKES—Cont'd

	LaSalle "50" & Spec.	Cadillac "62" Sixty Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
Brake drum material.....	Composite	Composite	Composite	Composite
Rear brake drum diameter.....	12"	12"	12"	14"
Rear brake internal or external.....	Internal	Internal	Internal	Internal
Rear brake lining, length per wheel				
Forward shoe.....	11 $\frac{1}{2}$ " ^g	11 $\frac{1}{2}$ " ^g	11 $\frac{1}{2}$ " ^g	13 $\frac{1}{2}$ " ^g
Reverse shoe.....	12 $\frac{1}{2}$ " ^g	12 $\frac{1}{2}$ " ^g	12 $\frac{1}{2}$ " ^g	15 $\frac{1}{2}$ " ^g
Total.....	24 $\frac{1}{2}$ "	24 $\frac{1}{2}$ "	24 $\frac{1}{2}$ "	28 $\frac{1}{2}$ " ^g
Rear brake lining width.....	2"	2"	2"	2 $\frac{1}{2}$ "
Rear brake lining thickness.....	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{3}{8}$ "
Rear brake clearance.....	.010"	.010"	.010"	.010"
Front brake drum diameter.....	12"	12"	12"	14"
Front brake drum material.....	Composite	Composite	Composite	Composite
Front brake drum internal or external.....	Internal	Internal	Internal	Internal
Front brake lining, length per wheel				
Forward shoe.....	11 $\frac{1}{2}$ " ^g	11 $\frac{1}{2}$ " ^g	11 $\frac{1}{2}$ " ^g	13 $\frac{1}{2}$ " ^g
Reverse shoe.....	12 $\frac{1}{2}$ " ^g	12 $\frac{1}{2}$ " ^g	12 $\frac{1}{2}$ " ^g	15 $\frac{1}{2}$ " ^g
Total.....	24 $\frac{1}{2}$ "	24 $\frac{1}{2}$ "	24 $\frac{1}{2}$ "	28 $\frac{1}{2}$ " ^g
Front brake lining width.....	2"	2"	2"	2 $\frac{1}{2}$ "
Front brake lining thickness.....	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{1}{8}$ "	$\frac{3}{8}$ "
Front brake clearance.....	.010"	.010"	.010"	.010"
Total foot braking area.....	196 sq. in.	208 sq. in.	253 sq. in.	268 sq. in.
Per cent braking power on rear wheels.....	45%	45%	45%	43
Hand brake location.....	Under dash on left side	Under dash on left side	Under dash on left side	Under dash on left side
Hand brake lever operates on.....	Rear service brakes	Rear service brakes	Rear service brakes	Rear service brakes

FRAME

Frame make.....	A. O. Smith	A. O. Smith	A. O. Smith	A. O. Smith
Frame depth, maximum.....	51 $\frac{1}{2}$ "	76 $\frac{1}{2}$ "	76 $\frac{1}{2}$ "	9"
Frame thickness, maximum.....	$\frac{5}{8}$ "	$\frac{5}{8}$ "	$\frac{5}{8}$ "	$\frac{3}{8}$ "

DETAILED SPECIFICATIONS—Cont'd

FRAME—Cont'd	LaSalle "50" & Spec.	Cadillac Fleetwood "62" Sixty Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
Width, maximum.....	2'	25 1/4"	25 1/4"	25 1/4"
Wheelbase.....	123"	62-129"	138"	141"
Tread—front.....	58"	58"	58"	60 1/4"
Tread—rear.....	50"	62-59"	62 1/2"	62 1/2"
First serial number.....	40-50-2-320,001	62-8-320,001	7-320,001	75-3,320,001
Serial number location.....	40-52-4-320,001	60S-6-320,001		90-5,320,001
Overall length with bumpers.....	On crankcase behind left cylinder block and parallel to the body dash 50-206 3/4" Spec.—210 1/2"	On crankcase behind left cylinder block and parallel to the body dash 62-216 3/4" 60S-210 1/2"	On crankcase behind left cylinder block and parallel to the body dash 226 1/4"	Upper left rear corner of left cylinder block parallel to cylinder head 75-228 3/4" 90-225 1/4"
BEARINGS				
Starter motor commutator end bearing—type.....	In cast iron frame	In cast iron frame	In cast iron frame	Bronze bushing 1/4" x 3/8" x 3/4"
Starter motor drive end bearing type.....	Bronze bushing 3/4" x 1 1/8" x 3/16"	Bronze bushing 3/4" x 1 1/8" x 3/16"	Bronze bushing 3/4" x 1 1/8" x 3/16"	Bronze bushing 3/4" x 1 1/8" x 3/16"
Starter motor drive end bearing size.....	Bronze bushing 3/4" x 3/8" x 3/4"	Bronze bushing 3/4" x 3/8" x 3/4"	Bronze bushing 3/4" x 3/8" x 3/4"	Bronze bushing 3/4" x 3/8" x 3/4"
Starter motor outboard bearing type.....	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"
Starter motor outboard bearing size.....	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"	Bronze bushing 1/2" x 3/4" x 3/4"
Generator commutator end bearing type.....	1/2" x 3/4" x 3/4"	1/2" x 3/4" x 3/4"	1/2" x 3/4" x 3/4"	N. D. Ball
Generator commutator end bearing size or Number.....	N. D. Ball	N. D. Ball	N. D. Ball	#8503
Generator drive end bearing make or type.....	#1203	#1203	#1203	N. D. Ball
Generator drive end bearing size or number.....	Bearings Co. of America C. T. D. S.-56	Bearings Co. of America C. T. D. S.-56	Bearings Co. of America C. T. D. S.-56	Bearings Co. of America C. T. S.-60A
Clutch throwout bearing make or type.....	Hyatt Roller	Hyatt Roller	Hyatt Roller	Hyatt Roller
Clutch throwout bearing size or number.....	#1294780	#1294780	#1294780	#1294780
Transmission pocket or spigot bearing make or type.....	Hyatt Roller	Hyatt Roller	Hyatt Roller	Hyatt Roller
Transmission pocket or spigot bearing size or number.....	#1294780	#1294780	#1294780	#1294780

DETAILED SPECIFICATIONS—Cont'd

BEARINGS—Cont'd	LaSalle "59" & Spec.	Cadillac Sixty Special	Cadillac Fleetwood "72"	Cadillac Fleetwood "75" and Sixteen
Clutch pilot bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Transmission reverse idler bearing.....	Steel backed habbitt	Steel backed habbitt	Steel backed habbitt	Steel backed habbitt
Transmission main shaft front bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Transmission main shaft rear bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Transmission countershaft front bearing make or type.....	Needle bearing	Needle bearing	Needle bearing	Needle bearing
Transmission countershaft rear bearing make or type.....	Needle bearing	Needle bearing	Needle bearing	Needle bearing
Rear axle pinion shaft front bearing make or type.....	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller
Rear axle pinion shaft rear bearing make or type.....	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller
Differential bearing right make or type.....	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller
Differential bearing left make or type.....	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller	Timken Tapered Roller
Rear wheel bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Front wheel inner bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Front wheel outer bearing make or type.....	N. D. Ball	N. D. Ball	N. D. Ball	N. D. Ball
Kingpin upper bearing make or type.....	Bronze bushing	Bronze bushing	Bronze bushing	Needle bearing
Kingpin lower bearing make or type.....	Rubber	Rubber	Rubber	Rubber
Rear spring front bushing.....	Rubber	Rubber	Rubber	Rubber
Rear spring rear bushing.....	Rubber	Rubber	Rubber	Threaded
Rear spring shackles bolt—upper.....	Rubber	Rubber	Rubber	Rubber
Rear spring shackles bolt—lower.....	Rubber	Rubber	Rubber	Threaded

FACTORY SHIPPING WEIGHTS—License Data

(5-Wheel Equipment—Without Running Boards)

Body Style No.	Body Style	LaSalle Fifty	LaSalle "Special"	Cadillac 62
27	2-4 Coupe	3707	3864	3956
67	2-4 Convertible Coupe	3802	3915	4045
11	5 2-Door Touring Sedan	3753	.....	.....
19	5 4-Door Touring Sedan	3816	3922	4032
29	5 Convertible Sedan (Trunk)	4005	4110	4230

Add 45 lbs. for running boards.

Add 105 lbs. for 6-wheel equipment on LaSalle Fifty and Cadillac 62 styles.

Add 185 lbs. for approximate curb weight.

FACTORY SHIPPING WEIGHTS—Continued

(6-Wheel Equipment)

Body Style No.	Body Style	Cadillac-Fleetwood		
		Sixty Special	Series 72	Series 75
57	2-4 Coupe.....	.....	4900*	.....
67	2-4 Convertible Coupe.....	.....	5030*	.....
57-B	5 Coupe.....	.....	4925*	.....
19	5 Touring Sedan.....	4154	4748	5270
19-F	5 Touring Sedan—Division.....	4160*	4753*	5275*
20	5 Convertible Sedan (Trunk).....	.....	5225*	.....
30	5 Town Sedan (Trunk).....	.....	5050*	.....
50	5 Formal Sedan (Trunk).....	.....	4670	.....
23	7 Touring Sedan.....	.....	4775	5215*
33	7 Touring Imperial.....	.....	4812	5363
33-F	7 Formal Sedan (Trunk).....	.....	4780	5375*
53	Town Car (Trunk).....	4365	.....	.....
23-L	8-9 Business Touring Sedan.....	.....	.....	.....
33-L	8-9 Business Touring Imperial.....	.....	.....	.....

Deduct 85 lbs. for 5-wheel equipment on Sixty Special; 70 lbs. on Series 72; 115 lbs. on Series 75 and Sixteen.

Add 185 lbs. for approximate curb weight of Sixty Special; 200 lbs. for Series 72; 215 lbs. for Series 75 and Sixteen.

*Estimated.